

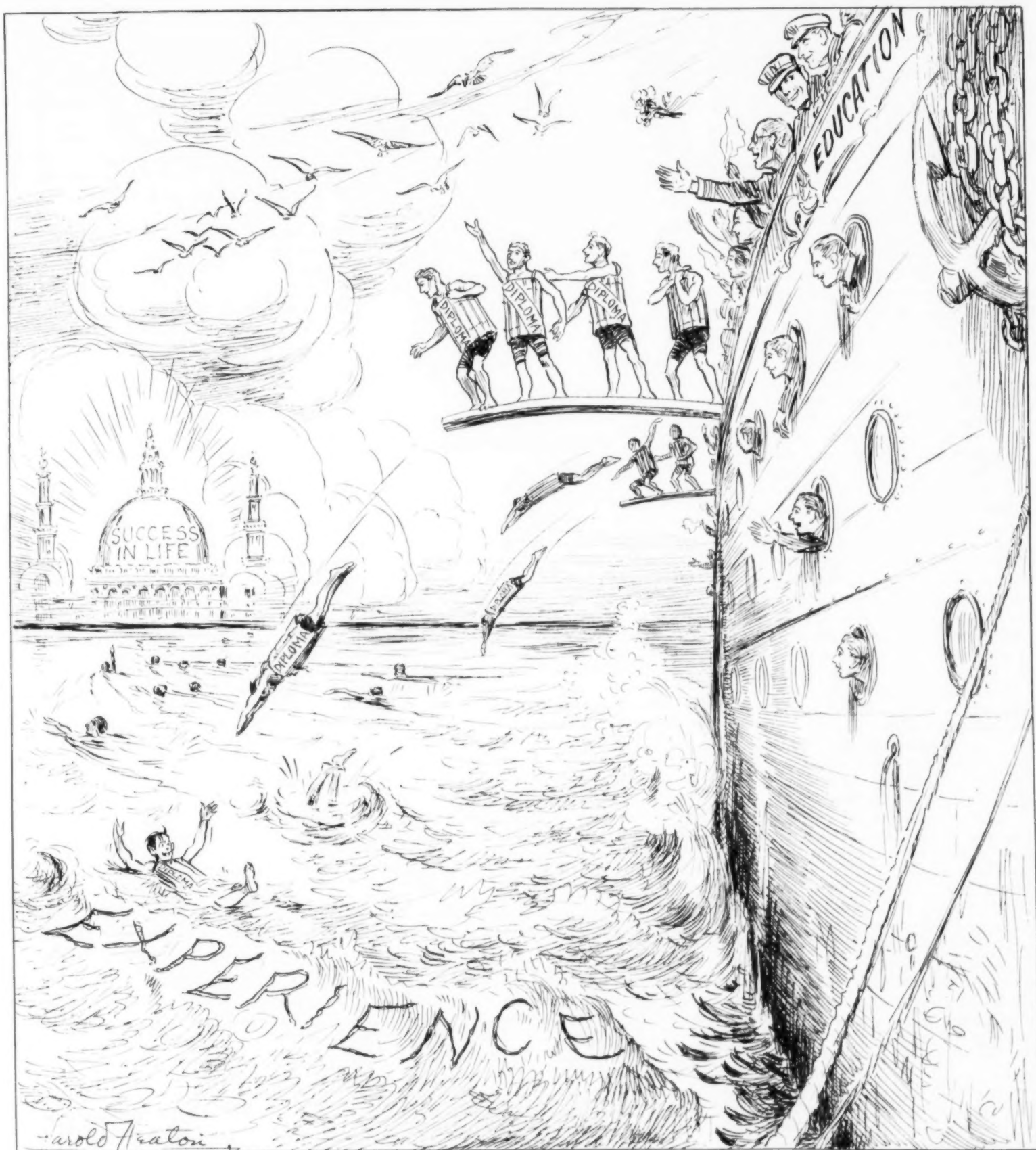
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Leaving the Training Ship

The Selection of New Teachers

A Letter From an Old Superintendent

Smithvale, Washington,
May 10, 1925.

Supt. Walter Youngman,
Jonesville, Washington.

My dear Nephew:

One of the most important jobs on your hand at the present time is probably the selection of your new teachers for next year. Of course, most of your teachers were re-elected in March but there are always a few places to fill during the spring and summer months due to the call of better positions elsewhere or due to the insidious inroads of our old friend, Cupid.

Whatever has been the policy of your board in the past, impress upon them the fact that if you are to be held responsible for the success of the schools, you must have the right as a professional man to select your own teachers. The board still has the chance to turn down one of your selections but you should then submit other candidates. It is not the board's duty to take the initiative in this matter because the schools are bound to suffer if they do so.

Small town schools may well take lessons from the big cities in this as well as in a number of other educational matters, for we all realize that the best growth in intellectual thought as well as progress in the profession has come through the city school administration. Just compare the wonderful advance which has taken place in the cities in this matter of selection of teachers. President Hendrix of the Brooklyn board of education wrote in 1892, "In the whole range of public school work, there is nothing to which the average member of the board of education takes to more than the appointment of teachers. He is flattered by the attention of the applicants, can oblige his best customer, take care of the sister or daughter of a friend, do a return favor to the political power which placed him, cleverly help a relation, etc." Compare this with the fact that in 1922, Deffenbaugh found in the returns of 520 cities of from 5,000 to 30,000 population that 483 had placed the power of selection of teachers in the hands of their superintendents. You see the trend! Carry on the work in the far places, Walter, and select your own teachers.

And how important it is that you secure the best. Of course, Prof. Cubberley tells us that a superintendent is fortunate if he secures 25 per cent excellent teachers, has 50 per cent fair average and only 25 per cent poor teachers. Try at least to get your share of the superior teachers for to that extent will you be successful in your work. What a load it would be to try to work with a smaller percentage of superior teachers.

My boy, I can't impress upon you too much the idea that a great deal of your success will depend upon getting the right kind of teachers. You may have the finest buildings, the best equipment, the most modern books and all the other essential facilities for teachers, but if you do not have a good corps, you are going to fail. Consequently, take plenty of time and use considerable care in selecting your teachers.

Ever bear in mind that in order to bring up the average of your teaching staff, it will be necessary for every new teacher you get to be better than the average of your present corps. In other words, get the board to pass higher and still higher standards, seeing to it, of course, that with increased qualifications demanded there be an increase in the pay so that you will be able to get teachers who will meet your requirements. Quite a while ago, Dutton and Snedden said, "In many respects, not the system of certification, but the system of appointment constitutes the gateway to teaching; and it is at this gateway that standards can be

maintained which shall ultimately determine the character of the profession itself."

In a school the size of Jonesville, I am sure that you will be satisfied with nothing less than normal graduation with two years of experience for grade work and college graduation with professional training for high school work. In this way you insure that any local girls, who may apply, have had at least two years successful experience elsewhere. I think, too, that in order to avoid trouble, it would be well to ask your board to pass a resolution not to employ married women. In theory it may be all right to have a good married woman teacher. In actual practice, it is all wrong in small towns, for it leads to jealousy, undercutting of salaries, tends to bickering among the teachers, and in most cases is entirely unsatisfactory. Of course, this would not apply to widows or those who are compelled to earn their own living.

Armed with the proper authority to secure your teachers and with definite salary schedule together with a set of standards and qualifications as resolved by your board, you are then ready to *hunt* your teacher. I agree in the statement that "it is more satisfactory to seek the teacher than to take the teachers who seek the school."

Write to the various normal schools, colleges, and your own county superintendent, telling them exactly the type of teacher you need and ask for recommendations. After looking over the selections of the various appointment secretaries, narrow the field to those who seem to meet your particular needs and then ask for interviews at a convenient time and place. Wherever possible, of course, you should visit the candidates in the schools where they are teaching, but this in many cases is impossible. A Saturday conference will be your best opportunity.

May I say, Walter, that this personal conference is vitally important. You should be kind and sympathetic with the applicants for in the presence of such an "august" personality as the superintendent, many applicants are not quite natural. Give them an opportunity to ask questions about the schools, your attitude, and the work required, then proceed to ask some questions yourself; endeavoring at all times to get an idea of their sincerity and personality. Among the points which ought to be brought up are: Their opinions on playground activities, community work, extra-school duties, church work, their philosophy of education together with their ideas of what is worth while in an education. A word of caution: Do not promise any particular work to an applicant. In a small high school, one never knows just what peculiar combinations may result when his schedule is finally completed. You will avoid trouble if you do not promise anything except that you will try to give them first preference in their subjects where possible.

Another thing, Walter, do not make the mistake of thinking that you are omniscient in this matter of selecting teachers by personal interviews. Some of my most superior teachers have such quiet retiring personalities that I doubt if they would "get by" any modern superintendent if they had to look for another position. Beware, just a little, of the modern girl who tries to use the sex appeal on you by showing a little more limb than necessary. On the "QT", a number of superintendents, if they are honest, will tell you that other things being equal, they will select a good-looking teacher. Why? Because, if she is easy to look at, it will be just that much easier for the children who have to look at the lady all day long, month after

month. Then, too, it is a little matter of psychology that the children will try harder for one whom they like. Therefore, while you may not go so far as to definitely attempt to hire good-looking teachers, try at least to get attractive, well-dressed teachers for whom the children will like to work.

After these careful interviews with teachers, the time comes when you must exercise whatever judicial and professional ability you possess in the final selection of your teachers. I feel that Cubberley's basis of rating applicants has considerable merit—from 0 to 25 per cent for professional preparation and experience; 0 to 40 per cent for evidence as to professional success; 0 to 25 per cent for personality and adaptability to the work of instruction, and 0 to 10 per cent for physical condition. In item 1, consider carefully whether or not experience has been accompanied by further professional training. I am always a little suspicious of the one who never finds time to go to summer school. Such a one may continue to improve by professional reading, reading circle work, but he or she displays a lamentable want of ambition not to take some advanced work from time to time.

I well remember one time when a teacher seemed quite desirable. Her references were all of the best, but a little "hunch" told me to beware. I looked further to find out that her references, imbued with a sense of sympathy for the girl, had neglected to state that she was accustomed to having epileptic fits in her classes. After evaluation of a teacher's success through a careful reading of personal letters from school boards, superintendents, and other people who know of her work, one may sometime get an insight into the desirability of a candidate as a member of a corps by writing to a fellow teacher of the candidate.

One must then rate the teachers in the light of his personal interview with them, on the basis of their personality and adaptability to his particular school system. If your town is conservative, it will be well to stay clear of the flapper teacher who might persist in going with the rounders in the town and who might want to get her amusement by attending the Saturday night dances. If your town expects the teacher to participate in the town activities and be a real citizen of the town instead of a sojourner for five days in the week, it would be well to select teachers who will not have to go to the big city every week-end in order to be satisfied with life. In short, there are a great many things to consider besides qualifications in education. One teacher with the wrong idea about things can bring your whole corps into disrepute.

Finally, from a doctor's examination, together with your own idea as well as that of people who know her, you should evaluate her physical efficiency. Many teachers may pass a physical examination, have no communicable diseases, and yet be on the borderline of a physical breakdown—at least be far from the top notch of physical efficiency.

After rating your candidates on the four points mentioned, select your teachers and request the board to formally elect them. I feel that it is sometimes a good custom to send the winning candidates around to the various members of the board. It enlists their cooperation if they know for whom they are voting a contract. It is then a good plan, to mail the contracts yourself together with a personal letter. Express your confidence in their ability to make good. Assure them that it is to your mutual interest to see that the teacher does her best. Instill in the teachers the feeling that you will do all in your power to make their stay in your town profitable and pleasant for all concerned.

(Concluded on Page 157)

What Do You Look for in a Superintendent?

Mrs. C. K. Henry

The capable man who starts out to secure for himself a house, a servant, or a yacht, usually knows pretty well what he wants, and what special qualities he is going to watch for in the object of his quest. A house that is pleasing to the eye, a servant that knows how to bow, are very good as far as they go; but before any bargain is closed they must give proof that they are sound in the fundamental requirements for which they are needed.

School trustees with a superintendency to fill, need be fully as practical. What do you expect of your superintendent? Have you a definite idea of the special traits you desire in the man? You interview an applicant who shows at once that he is a good mixer, that he will make lots of friends who will be an asset when he asks their support for the schools. Another available man is a scholar, a man who can make a fine speech at home or abroad, so that you can point to him with pride when you attend some of the state meetings where he is on the program. The deliberate man, the plodder, the driver, the good business manager, all are numbered on your list. Which one do you want?

Types of Superintendents

"I want the man who can run our schools well." But different men mean different things when they say "run our schools well." Occasionally a man is said to run the schools well when he only runs them smoothly, so smoothly that no one is disturbed—and no one stimulated. His schools do not run, they saunter.

Another school head may be progressive, so progressive as to be aggressive, introducing new ideas and new methods so rapidly as to seriously disturb pupils and teachers, and set the whole community by the ears.

When I was a child we lived neighbors to a woman who was so painfully clean that her house was anything but homelike. Even on Sundays she went about with broom and mop, seeking whom she could disturb. She had a spotless house, but a very uncomfortable home. Progressiveness, like cleanliness, can be made an end, when it ought to be only a means.

There remains one more type of superintendent whom I want to mention—the man whose first and finest quality is his own outstanding manhood. He must of course, know how to head a school system on the professional side; but I mean the kind of man of whom other men, his teachers, his boys and girls, will think of first as a *man*, their friend, rather than as their superior officer. Such a man, at the head of a school system, can do more for the real good of the boys and girls, and so for the community, than can the best school expert in the country, without noble manhood. Of course, the two qualities are not incompatible, but one ought to be considered above the other.

What is the *real* end for which you want a superintendent? It is the same end for which your whole complicated school system is, or ought to be, organized—the good of the *individual boy and girl* in your community. Our whole elaborate machinery, from the United States Commissioner of Education down, fails unless it reaches and elevates the individual child.

My life constantly brings me in contact with schoolmen, teachers, and pupils; I am impressed more every day with the importance of the personality, the manhood, the bigheartedness, of the head of a school system.

I know a large banking institution in which there is constant bickering, jealousy, and ill-will among the employees. The head official, after the president, went there when both he and the bank were young. He was a kindhearted, cour-

teous, generous man. Today he is a driver, growing more and more indifferent to the welfare or feelings of the men and women who are his subordinates, and made to feel so. Why this hard, selfish spirit throughout the place? The millionaire president of that bank is known wherever he goes, for his domineering ways, his almost brutal indifference to the weal or woe of his employees, his unbounded selfishness. He has created an atmosphere in which only those qualities can thrive. "The costliest thing in all creation is mental friction"; the energy lost in friction in this bank would go far toward doing the vast amount of work they have to do.

As with banks, so with schools.

The "Shadow" of a Man

"Every institution is the lengthened shadow of one man" is true of banking houses, it is true of industries, it is true of every school in which the master has been long enough to cast his shadow, or his radiance as I prefer to call it, over the system. His influence reaches every boy and girl. In the district adjoining ours lives such a superintendent. He is the sort of man who makes the day brighter for every schoolroom he visits. One day I happened to be walking with the daughter of a friend of mine when he passed and said a word of greeting. "Don't you love to see him smile?" said my little friend. "You know he says every boy and girl in the city is part of his big family." And I believe every member of that big family loves him, though he holds them up to work that makes his schools compare favorably with any in the state. This man has been at the head of these schools for years. Boys who came under his care in the early days are now prominent in the affairs of the city, to the city's benefit. Some time ago I said to a friend: "I firmly believe that Dr. Mason has been a greater power for good in your city than all the ministers of all the churches during his time." After I had said it I was a bit startled at my own audacity, as this woman was a great admirer of her own pastor. Without a moment's hesitation she said, "I thoroughly agree with you, though I think we have some excellent clergymen."

Well, how can one find out what manner of man is the superintendent who has applied for the position? Go at it in a practical business way. Suppose the house *looks* all right; are you satisfied with that? No, you want to know whether it is a convenient and comfortable place, whether its interior is up to the mark—the range, the furnace, the light, the arrangement. You look to see if the roof is good, and the *foundation*.

In your quest for the truth about the house you try to get information from the last occu-

pant. You want to know if it met their requirements last year, and the year before that. Yet you and I have seen superintendents called to positions of responsibility and influence on the strength of one short interview. The man is well groomed, he has proper credentials, he is pleasant to talk to. He is elected.

I have seen more than one instance where a man who had been receiving \$4,000 a year was elected to a \$2,500 position without being asked to explain why he was willing to accept the lower salary. Nineteen times out of twenty there is something seriously wrong in such a case.

After you had looked at the house you got all the information you could from the person who knew the house best, the one who had lived in it. Why not investigate the character and ability of the school applicant in the same way? What does his present community think of him? How do his teachers regard him? His boys and girls?

The Judgment of the Schools

When you selected the house I think you consulted your wife's judgment, or your housekeeper's. You looked the new car over with your chauffeur before you bought it. They know something about these things. I often wonder why, when a new superintendent is needed, some of the most reliable teachers in the system are not consulted. One must be very careful in selecting these teachers, but if you have not, somewhere in your corps, several men and women whose judgment and discretion can be trusted in such matters, you have been but an indifferent trustee. One year from now you will unquestionably accept the new superintendent's word, good or bad, about your teachers (you ought not, but you will); can you not trust the teacher who has proven her sincerity during the last twenty years, regarding a proposed superintendent?

"You will go visit his town and his schools yourself." Surely. But why not let her go too? She will, in a perfectly honorable way, find out more in a day than you will in a week, for the same reason that your wife can judge the interior of a house better—it is her business.

Children size up a teacher more accurately in a week than a superintendent can in a month; teachers can judge a superintendent better in a month than the average school board can in a year. Their skill could be utilized in a way that is entirely fair, and just to *both sides*.

The superintendent has an influence over the boys and girls, that lasts for all time. Watch the boys in a school where the man's pipe lies on his desk; where he is careless in dress; in speech; the man who tells objectionable stories; has low ideals. Perhaps I have told before, the story of a little boy who, all his life long (seven years) had counted on the day when he would be big and have a *mustache*. Then he was sent to a new school, and saw the principal, whom all the boys adored. The boy watched the, to him, wonderful face, and loved the man. But there was no mustache; and he told his mother that evening that he would never have one. Boys copy other things, besides the style in mustaches.

In a remote farming community in Pennsylvania one happens now and then on a man whose appearance, speech, ideals, put him far above his neighbors. If one takes the trouble to look into the matter one finds that these superior men reflect the influence of one man, who, for his health's sake, taught a private academy in those hills years ago, when these men were boys.



We usually take notice of the way a teacher gets along with her pupils. I wonder why we do not pay more attention to the way a superintendent gets along with his teachers. Boards of education who would not accept an architect's unquestioned opinion on a school building, nor follow implicitly an expert's advice regarding their budget, too often allow the decision of one man to dictate their policy toward his coworkers. It is not wise. It is not just. Two heads are better than one, and the opinion of the man should be sustained, modified, or opposed, as the case may be, by a properly informed committee.

Among superintendents, as among the clergy, bankers, or other groups, there is an occasional one who will allow prejudice, jealousy, foolish notions of what he calls insubordination, make him deal most unjustly with members of his staff. I have seen instances where teachers of twenty years' service in the schools were treated with cruel injustice on the word of a man not one year in the community. In our law courts a criminal is given a chance to defend himself, which is sometimes not true of our teachers.

Occasionally one of them takes the risk of going directly to the members of the board. I know one such several years ago. Her culture, her womanliness, her ability, made a very strong impression, and her case was decided favorably. That set several members of the board thinking, and observing; the next year they secured a new head for their schools.

A good schoolman is not afraid of a board that looks into some of these things for itself. He welcomes this sharing of responsibility. Many a time when he is perplexed, hesitating to dismiss a teacher, yet feeling that she is not doing for the children and the schools what some other teacher would, he would be very glad of the judgment of a trustee who had taken the trouble to inform himself about her and her work.

The School Board Member's Duty

Perhaps you feel you haven't time. It doesn't take a whole lot of time. Keep your eyes and ears open a bit in that direction. Notice the

way school children speak of their teachers, and of the superintendent, when you are not supposed to hear. They are keener judges than you are. As you go back and forth to business you are likely to hear comments. One splendid way to measure the stature of your schoolman is the way in which he speaks of his subordinates. If he is constantly criticising and condemning them, if he airs their weaknesses with apparent relish—well perhaps he is not the man you want. I heard a school trustee say of a superintendent lately, "I have never yet heard him speak well of a teacher." Yet that man was retained in his position for three years, and even then it was public sentiment that forced action.

You know how you feel when one boy quarrels with all the rest; when one man in your office finds fault with everyone else. Apply the same knowledge to school affairs. When a large proportion of teachers leave every year, either voluntarily or on the superintendent's recommendation, when criticism is always forthcoming, when there is a constant undercurrent of friction and unrest, be just and find out who is to blame.

One of the important duties of a superintendent is the selection of his teachers. Fully as important is the duty of encouraging and inspiring them after they are associated with him. It is an essential principle of life to respond to favorable environment; and a teacher cannot grow when she is in constant fear of criticism, of injustice, of unfairness. A superintendent cannot inspire if he has the effect of the iceberg of which Mrs. Thaxter wrote:

"And wheresoe'er a smiling coast it passed,
Straightway the air grew chill."

When you are looking for a superintendent look for him partly from the standpoint of your teachers, but especially from the standpoint of your boys and girls. What they study out of books will grow more and more hazy as the years go by. What they get from *him* will stand out more clearly, and will stay by them, for good or ill, even to eternity.

all the teachers of all the grades in all the schools; the high school principal may work with his teachers in courses of study for his school in the tenth, eleventh and twelfth grades, but the superintendent is responsible for all the courses of study in all the grades; the principal may know how to work with students from fourteen to eighteen years of age in their clubs and activities, but the superintendent must be able to fit in and understand groups of all ages; the principal should know how his building should be built and equipped, but the superintendent must know how to build and equip schoolhouses for all grades; the principal should know something about the community needs as he studies the students of his school, but it is the superintendent who must write the reports from the whole city into a school program for all the schools. In other words, it may be said that the high school principal knows but one department of a city school system, even though his school contains the senior grades of that school system.

There is an office in most of the large city systems that studies the work of the superintendent's office from the angle of the superintendent of schools. The person in that office is usually known as the assistant superintendent. Reference is here made to an officer whose chief duty is to be administrative assistant to the superintendent. He works with the superintendent on any one or all of the superintendent's duties. The superintendent may delegate to him certain of these duties to be performed without further approval of the superintendent. Others may be delegated for study and report back to the superintendent for a joint conclusion. This officer is called in to most of the conferences, committee meetings, etc., where his attendance will aid the superintendent. Through him the superintendent is able to multiply himself by two with respect to many of the duties of the office. He may be charged with the supervision of certain grades, the selection of new teachers in all grades, or with such a thing as the standard testing program in all grades, such special assignments depending upon the size of the school system and special training of the assistant superintendent. He is usually one of a small group who advises with the superintendent in most of the major problems in the city school system. Such an officer then has a similar range of training and experience as the superintendent; he gets his training, takes his position and fills it with the idea of becoming qualified so that he may take a position later as a city school superintendent. This officer is suggested as a candidate for a city school superintendency as contrasted with the principal of the high school.

With these things in mind, Dr. Briggs's remark has considerable force back of it. It may be said that a superintendent or an assistant superintendent will not necessarily be a successful high school principal, just as it has been said that a high school principal will not necessarily make a successful city superintendent. There need be no confusion and debate on this point if boards of education choose them in the respective fields. Of course it is conceivable that a man might try both fields. Such trial should come in his early experience.

The point offered in this paper is that in the educational profession we need to recognize specialized training and qualifications. The traditional plan of promotion should not be followed unless there are professional reasons to justify the same. Professors of education and school people generally are recognizing these lines of training and adapting their practices accordingly. The plea is made then to the boards of education and certain administrative officers to choose men trained for their work.

Recruiting City Superintendents

W. W. Curfman, Assistant Superintendent of Schools, Lincoln, Nebr.

Dr. Thomas H. Briggs was heard to say in a recent public address: "...Men who resign principalships to become superintendents are leaving education." No student of school administration is in doubt as to what Dr. Briggs means, since he is so deeply interested in the field of secondary education.

In spite of the humor involved, the remark calls to mind a point that needs further consideration. One might restate the quotation as follows, "Men who resign principalships to become superintendents are frequently leaving the field of work for which they are trained and are very likely to find themselves attempting a job for which they are not trained."

There is a custom or tradition in the United States for boards of education to promote the high school principal to the position of city superintendent, when there is a vacancy in the latter office. There is much that can be said in favor of that practice, especially for days gone by.

It has been true that there were no professional study courses that trained men particularly for high school principalship. But today, we have departments of secondary education in the best teacher training institutions of our country. In these departments a man may be trained for the work of a high school principal. Of course it is true that a man with characteristics and qualities that make him a successful

principal will find some of those same attributes helpful in his work as a superintendent. But, this is not necessarily true to any great extent. The most that can be said for him is that when he becomes a superintendent he will know something about high school work.

By the very nature of his position, the high school principal does not have a great deal to do with the administration of the whole city school program. The principal deals with the one school—the superintendent with many schools; the principal with but one section of the entire range of school grades—the superintendent with all of the grades; the principal may recommend to the superintendent concerning his one school, but the superintendent meets the board of education with policies for the whole school system; the principal may and should help in the assignment of his own teachers, but the superintendent selects and assigns

THE STATE AS A UNIT

The educational system of the state should be spoken and thought of as a unit, as one thing, beginning with the elementary and rural schools and extending through the high schools, the colleges and the universities. We cannot have a poor rural school even in the remotest corner of the state without affecting, in some measure at least, the citizenship and entire educational program of the state.—Charles A. Lee, State Superintendent of Missouri.

The Legal Status of School Bonds

Neil F. Garvey, Marshall, Ill.

(Conclusion)

V—NEGOTIATION OF THE SECURITIES

Immediately following the closing of the polls in the election on a bond issue, the ballots are canvassed by the judges and the returns certified to the officials whose duty it is to issue any bonds which may have been authorized. In most instances these officials are the board of trustees of the district, although in many states the issuance of bonds is a function of some county official, as the county clerk, county treasurer, or county court. In either case it is quite common to require that a record of all the proceedings incidental to the election and the negotiation of the securities be filed with the proper county officer.

Some states provide that the bonds "shall be of such form as the school board may decide upon." In the majority of cases, however, it has been deemed advisable to prescribe some minimum essential features which the bonds must contain. A rather typical example of the form designated may be seen in a section from the laws of Utah:

"Whenever any bonds are issued under the provisions of this chapter, they shall be engraved, lithographed, or printed on bond paper, and shall state upon their face the date of their issue, the amount of the bond, for what purpose issued, also the time and place of the payment and rate of interest to be paid. They shall have printed upon the margin the words "Authorized by act of the legislature of the State of Utah, A. D. 1897, and all supplemental and amendatory acts," and upon the back of each bond shall be printed a certificate signed by the county clerk, in substantially the following form:

I certify that the within bond is issued in accordance with law, and is within the limit permitted by the constitution and laws of the State of Utah, and in accordance with a vote of the taxpayers of school district of county, State of Utah, at an election held on the day of 19....., authorizing bonds to the amount of dollars.

They shall be signed by the president and clerk of the board of education and countersigned by the treasurer thereof, and there shall be entered in a book to be kept for that purpose the number, date, and denomination of the bonds sold, and the date when the same shall become due."⁴⁶

There is, of course, some deviation from these provisions, chief of which occurs in the instance of the endorsement required upon the back of the bond by the county treasurer. The last section of the quotation, relative to the registration of bonds, is an almost universal rule.

In general, the bonds may be either of the coupon type or registered, although it is not infrequently required that they shall be coupon bonds. Where the coupons are attached, they must bear the amount of the bonds, the interest rate, and the date of maturity, and must be signed by the same officials whose signatures appear upon the face of the bond. These signatures may, in most instances be facsimiles. If the district has adopted a corporate seal, this shall also be impressed upon both the bonds and the coupons. An act of the State of Washington of 1919, declared that after July first of that year, all bonds must be issued in serial form.⁴⁷ Under the statutes of North Carolina, such securities "must be serial, the proportionate parts being payable annually."⁴⁸ West Virginia also has decreed that they shall be issued serially "in equal installments, so that after the first five years from the date of their issue one series shall fall due and be payable in every year of the remaining period of their issue."⁴⁹ New Jersey and Mississippi likewise require that only serial bonds be issued.

Before the bonds authorized may be sold an advertisement must be published for a given length of time, varying from one to four weeks with the different states, requesting that prospective purchasers submit to the proper authorities a sealed bid of the securities. It is customary, as well, to require that a certified check for an amount equal to from one to ten per cent of the bid, be submitted at the same time, as a forfeit.

Some states require that the bonds shall be sold to "the highest bidder," with no other limitation than setting a minimum sale price. Others modify this provision by stating that they shall be disposed of to "the highest and best bidder," or to the "highest responsible bidder," thus giving the board some discretionary power in the matter. A general practice also, is to empower the board to reject any or all bids. Montana and Nevada permit the boards to dispose of the bonds through a private sale, when they deem such a course to be for the best interests of the district.

In Idaho, when an issue of bonds has been authorized, the first opportunity to purchase "shall be given to the State Board of Land Commissioners for purchase out of funds under the control of the State."⁵⁰ The school boards of Texas after having a certified record of the proceedings approved by the Attorney General, and registered by the Comptroller of Public Accounts, must offer all bonds to the State Board of Education, who have a ten-day option to purchase them at the price offered by the best bona fide bidder.⁵¹ Minnesota and New Jersey, each impose similar conditions upon the sale of these evidences of indebtedness.

In Arizona, if bonds remain unsold for six months, the board of supervisors may be petitioned to withdraw and cancel the same.⁵² Any political unit or school district organized under the laws of California may sell any bonds thereof, remaining unsold and which have previously been authorized by the qualified electors in accordance with the law, at a price which will net the purchaser not more than six per cent premium, payable semi-annually on the par value of such bonds. The board of supervisors of any county in California may be petitioned to withdraw and cancel any bonds of a school district of that county, which remain unsold for a period of six months. It is mandatory upon the board to hold a public hearing upon such a petition.⁵³

The courts have held that the payment of a commission to secure the sale of bonds, which may in effect reduce the net proceeds below the minimum sale price is illegal, but will not render the bonds void.⁵⁴

Summary: The returns of elections upon the issuing of bonds are certified by the judges to the officials authorized to issue them. Most states describe some conditions which must be met as to the form of the bonds. These usually have reference to the date of issue, purpose for which issued, rate of interest and official signatures and date of maturity. Five states require that bonds shall be serial in form. The sale of bonds is advertised and bids for the same are submitted under seal. The bonds are sold to the highest bidder or the highest and best bidder. Four states require that some agency of the state be given the first opportunity to purchase the bonds. If bonds remain unsold for a given period of time, provision is made for their withdrawal.

VI—THE REFUNDING OF BONDS

All of the states have made provision for the refunding of outstanding obligations in case there is not sufficient funds in the district treasury. In some instances it is possible to refund them before their maturity, to take advantage of a more favorable condition in the money market. Such a procedure can only be practical, however, where the original issue is redeemable at the option of the district.

In general it may be said that the same conditions prevail in the refunding of a bonded indebtedness as in the floating of the original loan, except that in no case other than the State of Wyoming is a vote of the electorate necessary to authorize such an issue. A few variations from this rule should be noted, as follows:

	Limitations on Original Issue		Limitations on Refunding Bonds	
	Years	Interest	Years	Interest
Indiana	25	5%	15	6%
Kansas	15	6%	30	6%
Missouri	20	8%	5-30	8%
North Dakota..	10-20	5%	10	5%
Washington ...	23-40	6%	20	6%
Wyoming	25	6%	30	6%

Bonds must be exchanged par for par, except in a very few cases. Kansas is an example of such an exception, where the amount of refunding bonds issued may include coupons and judgments upon the original instruments.

The courts of Missouri also hold that if there is any unpaid interest on the original bonds new bonds may be issued to lower both principal and interest of such old bonds.⁵⁵

Utah has made a provision whereby the validity of any bond issue may be challenged and judicially determined before the indebtedness is refunded.

"The board of education shall cause to be published once a week for two successive weeks in a newspaper published in said school district, or if there be no such newspaper, then by posting for a like period in three public and conspicuous places in said district, a notice describing with sufficient particularity for identification the bond or bonds intended to be refunded, and requiring any and all persons objecting to the legality, regularity, or validity of said bond or bonds, or of the issue or sale thereof, of the indebtedness represented thereby, to be and appear before such Board of Education at a specified place within said district on a specified day and time, which shall not be less than fourteen nor more than sixty days after the first publication of said notice, then and there to present in writing duly certified, such objection as he or they may have to the legality, regularity, or validity of said bond or bonds, the issue or sale thereof, or the indebtedness represented thereby. If no objections are filed the board of education shall so certify, and all persons shall thereafter be forever barred from questioning in any manner or proceeding, the legality, regularity, or validity of such bond or bonds, or of the issue or sale thereof, or of the indebtedness represented thereby and said board of education may thereupon refund or redeem said bond or bonds.

Persons filing written objections shall within twenty days thereafter commence legal proceedings against the board of education, to challenge and determine such validity. Failure to do so in twenty days shall act as though no objection were filed."⁵⁶

VII—REDEMPTION OF BONDS

The faith of school districts is pledged to the payment of interest and the redemption of the principal of all bonds issued. The districts are given corporate existence, so that it may be possible to enforce such obligations. These provisions recur with great frequency throughout the laws and court decisions of the states. The extent of the obligation may be seen in the fact that the dissolution of a district in no way effects a release. The provisions of the California law relative to the status of the legal debts

⁴⁶Bauer v. District 788, 442.

⁴⁷State of Utah School Laws, 1923. Section 4635.

⁴⁸State of Utah, School Laws, 1923. Section 4633.

⁴⁹School Laws of Washington, 1919. Section 4607.

⁵⁰Public School Law of North Carolina, 1919, Section 5885.

⁵¹School Law of West Virginia, 1920, Section 183.

⁵²Idaho School Laws, 1910. Section 78.

⁵³School Laws of Texas, 1922. Section 39.

⁵⁴School Laws of Arizona, 1921. Paragraph 2749.

⁵⁵California School Law, 1921. Section 1889.

⁵⁶Franklin et. al. v. Roscoe, 75 Mo. 408.

of a district in case of a change in the boundaries of a district, is a good summary of the laws of similar nature enacted by the various other states.

"When school districts are created or abolished or the boundaries thereof are changed, the liability to taxation for the outstanding bonded indebtedness therein as hereinafter set forth, and the authorities whose duty it is to levy taxes for the payment of principal and interest on said bonds shall levy the same upon the districts affected in such proportions as are herein provided or are determined under the authority hereof.

a. When any school district is united or in any manner merged with one or more school districts so as to form a single district, the district so formed is liable for all the outstanding bonded indebtedness of the districts so united or merged.

b. Territory annexed becomes liable for the bonded indebtedness of the district of which it becomes a part. The district becomes liable for a portion of the indebtedness of such territory annexed, to the extent of buildings, etc., under bond in that territory.

c. In the division of districts, the county board shall determine the proportion of indebtedness due to fixtures in each new district, and the liability shall be fixed accordingly."⁵⁷

The officials responsible for making the tax levies for any school district, are charged with the duty of providing sufficient funds to meet the accruing interest and principal, when due, upon all valid bonds of the district. In general, the surplus in such fund after the payment of interest due on bonds which are a valid and legal obligation against the district, shall become a sinking fund. Some states only authorize the creation of a sinking fund until a certain portion of the term of the bonds has elapsed, while others restrict the amount which may be set aside for sinking fund purposes in any year. A few of these should be noted.

In New Mexico, no sinking fund levy may be made until after half the term of the bonds has expired.⁵⁸ Five years must have elapsed from the time of their issue before a sinking fund may be instituted to meet the bonds of North Dakota.⁵⁹ The Colorado laws permit the creation of such a fund, beginning with the "year preceding the one after which bonds are redeemable, and annually thereafter," with the levying of taxes to such a percentum of the bonds as will assure their redemption at maturity.⁶⁰

While conferring this same general power, Minnesota prohibits the investment in bonds issued to aid in the construction of any railroad. The rate of interest may not be less than three and a half per cent in this state.⁶¹ Oklahoma makes it mandatory on the part of the board to annually invest all moneys raised for the purpose of creating a fund for the final redemption of bonds, in the securities of the state of Oklahoma or of the U. S., or at their option, to buy and cancel the bonds of the district, whenever such may be purchased at or below par.⁶² In addition to these investments, North Dakota authorized the investment in first mortgages on land which is under cultivation in the state. Such notes must not exceed ten years in length, and must bear six per cent interest.⁶³

In some instances, bonds may be redeemed prior to the date of their maturity. For example, Iowa provides that whenever the amount in the hands of the treasurer, in the special bond fund, is sufficient to redeem one or more of the bonds, which by their terms are subject to redemption, he shall give the owners of such bonds thirty days notice of the readiness of the district to pay off the bond. If it is not pre-

sented within that time, interest on the bond shall cease at the expiration of the thirty day period.⁶⁴ The provisions of the various states which provide for redemption before maturity are very much similar to this Iowa statute.

West Virginia, which requires that bonds be issued in serial form, authorizes any board to pay any or all outstanding bonds at any interest period, after the first five years, by notifying the holders of such securities by letter or sixty days newspaper publication. New Jersey requires that the bonds be payable in annual installments commencing not more than two years from date of issue, but that no installment shall be more than fifty per cent in excess of the amount of the smallest prior installment.

All bonds redeemed or paid, shall have writ-

⁶⁴School Laws of Iowa, 1919, Section 2812-f.

The Value of Cold Storage for Intelligence Test Data

William Howard Brown, Principal High School, Amherst, Mass.

It has been said that one of the chief uses of the results of intelligence tests is to occupy the space on a top shelf, there to remain until some other demand for the space sends the data to the furnace. Provided this fate does not overtake it too soon, a repose of a few years on such a shelf may enhance the value of this data, or render it more effective in the interpretation of current data. An examination of the facts given below illustrates the point.

In October, 1921, the class of 1925 in the Amherst high school, then freshmen, took Form A of the Terman test. Of 126 members, 42 were among the members of the senior class in 1925.

- 26 were from the highest third in the test.
- 8 were from the middle third in the test.
- 8 were from the lowest third in the test.

Those who became members of "Pro Merito," the honor scholarship society, ranked on that test in the following positions: 4, 5, 9, 13, 32, 33, 39. The student receiving highest honor at graduation ranked 33; the student receiving second honor ranked 32.

In October, 1922, a total of 141 freshmen, members of the class of 1926, took Form B of the Terman test. Of that number 59 are seniors now.

- 23 ranked in the highest third on the test.
- 18 ranked in the middle third on the test.
- 18 ranked in the lowest third on the test.

Those who became members of Pro Merito ranked 3, 9, 12, 69. The student receiving highest honor entered school after the test had been given, but the student receiving second honor ranked third. Pro Merito members ranked 2, 3, 4, 7, 8, 9, 10, 11, 13, 16, 20, 21, 22, 38. There were 44 members in the class. First honor ranked 8 and second honor ranked 7.

The class of 1923 took Form B in October of the senior year. Pro Merito members ranked

ten across their face and upon each coupon, the words "Paid and Cancelled" The usual requirement is that these words be written in red ink.

Summary: The faith of the school district is pledged for the redemption of its bonds. This is in no way altered by any change in the boundaries of the district. Officials who make the tax levies must make provisions for the interest payments and creation of a sinking fund. This sinking fund may be invested in protected securities, under certain restrictions. In many instances bonds may be redeemed prior to their date of maturity. In any instance the interest on a bond ceases at the time it is due or is called in for redemption. Bonds that are paid shall be so marked as to render them void.

2, 3, 4, 5, 6, 8, 12, 20, 27, 36, 53. There were 66 in the class. First honor ranked 4 and second honor ranked 3.

In October, 1923, 45 members of the class of 1924, then seniors, took Form 3 of the Thorndike-McCall Reading Scale. Pro Merito members ranked 1, 2, 4, 5, 7, 8, 11, 16, 19, 23, 32. First honor ranked 1 and second honor ranked 16.

At the same time 63 members of the class of 1925, then seniors, took the same test. Pro Merito members ranked 1, 2, 4, 5, 12, 17, 18, 33. First honor ranked 5 and second honor ranked 4.

In March, 1925, 53 members of this class, then seniors, took the Brown University test. Pro Merito members ranked 1, 2, 4, 5, 7, 11, 36. First honor ranked 2 and second honor ranked 5.

According to this data a student ranking in the upper third on the Terman test in his freshman year has about one chance in two of becoming a senior three years later. A student ranking in the middle or lower third has about one chance in four of becoming a senior three years later. Students who have dropped back a class but are still in school are not considered in these figures.

Those who survive to become Pro Merito students are, with one exception, found in the highest third in the freshman year.

With all tests and all classes, Pro Merito students are found 37 times in the highest third, twelve times in the middle third, and three times in the lowest third.

Thirteen different comparisons are possible of honor parts and ranks on test. All but one was in the highest third. Eight were in the highest tenth.

Let it be thought that there is an excessively high mortality between entrance and graduation in this school the following survival percentages based on a survey of the entire county conducted by the U. S. Bureau of Education in 1921 are given. The figures indicate the number who remain in each year out of every hundred freshmen.

	Amherst	U. S.
First year	100.	100.
Second year	78.5	74.5
Third year	50.0	53.3
Fourth year	40.8	39.6

Probably no more typical school would be found, so far as survival is concerned.

No one can deny the value to a school principal of having some indication which is not entirely guesswork as to the students in the entering class who are likely to excel or who are likely to drop out before the completion of the course. These tests clearly have some value in making such predictions.

⁵⁷California School Law, 1921. Section 1888a.

⁵⁸Compilation of New Mexico School Laws, 1919.

⁵⁹State of North Dakota General School Laws, 1919, Sec. 4027.

⁶⁰School Laws of Colorado, 1917, Section 21.

⁶¹Laws of Minnesota Relating to the Public School System, Section 145.

⁶²School Laws of Oklahoma, 1919, Section 152.

⁶³State of North Dakota, General School Laws, 1919, Sec. 1336.

PHRASES AND DEEDS

Haven't we listened about long enough to pretty speeches about the inalienable rights of every child to an education and to the beautiful theories of equal educational opportunities for all children? Commencement addresses are filled with glorious phrases lauding our wonderful public school system and pointing to the splendid opportunities given in free America for every child to rise to his full stature. But the thing that happens does not match with our words. Too many advocates of this fine doctrine of equal educational opportunity for all do not do more than talk about it. If all who profess to hold the theory would lend a hand to the solution of the financial problem, it could be adjusted within the state in a very few years so that every child might have the opportunity pledged him in the constitution.—May Trumper, State Superintendent, Montana.

State Approval of School Buildings, Equipment and Sites

A. L. Heer, Ohio State University, Columbus, Ohio

It is usually agreed that education is a state function. There are no definite limits established as to how much the state should do and what should be left to the local community. One of the important factors in the education of the children of a state is proper physical equipment. As one observes school buildings, equipment, and sites, one is frequently impressed with their inadequacy to carry out a modern educational program. This is true not only of older buildings, but also of many of very recent construction. It is evident that the plans and specifications were not given careful consideration. It is the purpose of this study to determine what systems of state supervision have been developed to insure proper school housing, school equipment, and school sites.

The school laws of the various states were the principal source of information. The sections relating to the construction and equipment of buildings were studied for the following items:

1. Approval of plans and specifications for new buildings.
2. Approval of plans and specifications for addition to old buildings.
3. Approval of plans and specifications for repair of old buildings.
4. Approval of plans and specifications for equipment.
5. Approval of school site.
6. By whom the approval was given.
7. Whether the state possesses the power of condemnation and, if so, by whom the power is exercised.
8. Whether the state furnishes plans and specifications for the erection of smaller buildings which plans are loaned to school districts desiring to use them.

In the study of the school laws for the above items, it was early discovered that some needed information was not included in the laws. It was further discovered that some statements were either ambiguous or out-of-date. In order, therefore, to secure the further information needed to check the information secured from the school laws, the following questionnaire was sent to the chief school officer of each of the 48 states. Accompanying the questionnaire was a personal letter explaining the purpose of the study.

Please answer the questions below to indicate what system has been developed in your state for the control of local school housing and equipment. Return to A. L. Heer, Dept. of School Administration, Ohio State University, Columbus, Ohio.

1. Does your department exercise control over local school housing and equipment through—
 - a. Approval of plans and specifications for new school buildings?
 - b. Approval of plans and specifications for addition to old buildings?
 - c. Approval of plans and specifications for the equipment of new buildings?
 - d. Approval of new building sites?
2. Please note any exceptions to the foregoing answers.
3. Give the name and title of the official in your department who gives the approval noted under No. 1 above.
4. If your department does not give such approval, is there any other state agency empowered to do so?
5. Please give the name of any such agency and the name and the title of the chief officer.

6. Does the state have authority to condemn school buildings which it deems dangerous or unsuitable for use?
7. What agency or department and what official has this authority? Agency or department? Official?
8. Does your department prepare plans and specifications for new school buildings to loan to local school districts of the state?

Name.....

Title.....

Replies to the questionnaire were received from all of the states. While Utah did not return the questionnaire, they sent a marked copy of the school law. In some cases a personal letter was returned with the questionnaire carrying further explanations.

Evidently some of the school laws did not include the latest legislation upon the subject. In a number of cases there was a wide divergence between the reply received and the facts as recorded in the school law. In some other cases the information sought was not all given in the school laws. In recording the data in the table below, it was necessary to adopt some expedient to distinguish the facts found in the laws from those taken from the questionnaires. With the exception of a few cases indicated below, any item marked "A" means that this item was found in the law and agreed with the replies to the questions in the questionnaire. An item marked "B", indicates that the information was taken from the questionnaire only. Where an item remains unmarked, it indicates that neither the law nor the questionnaire contained this item. In the case of Indiana and Wisconsin no information could be found in the school laws, therefore, what information is recorded from these states is from the questionnaire.

The following states require approval of all new school buildings:

Delaware	Nevada
Idaho	New Jersey
Iowa	North Carolina
Indiana	North Dakota
Louisiana	Pennsylvania
Maine	South Carolina
Maryland	South Dakota
Michigan	Texas
Montana	Vermont
Minnesota	Wisconsin

The following states have limited approval only, usually exempting the larger cities:

Arkansas	New York
Connecticut	Ohio
Georgia	Tennessee
Kansas	Utah
Kentucky	Virginia
Massachusetts	West Virginia

State examination and approval only was considered in the above table. In many of the laws, as in those of California and Illinois, there is a provision for county approval. But since the purpose of this study is to learn what state systems have been developed, no further mention will be made of any approval other than that of the state. A number of the states are checked under "Limited Approval". By this is meant that state approval is not necessary according to the school law in certain types of school districts. Each of these cases will now be explained.

The last item listed in Table I shows the number of states that prepare plans and specifications to supply to boards of education. Twenty-one states indicated on the questionnaire that they do this. In practically all cases they are plans for buildings from one to four rooms only. Virginia also furnishes inspection during the process of construction.

From the facts stated above, it is seen that the states vary from no regulation and regulation by offering to supply plans and specifications to the approval of all plans and

TABLE I.—SUMMARY OF INFORMATION FROM SCHOOL LAW AND QUESTIONNAIRE

	State Approval	Limited Approval	Plans for New Buildings	Addition to Old Buildings	Repair to Old Buildings	Equipment	Site	State Board of Education	State Board of Health	Department of Public Safety	Inspection of Workshops and Factories	Superintendent of Plans	Condemnation	Lends, Plans and Specifications
Alabama	B	—	B	B	B	B	B	B	—	—	—	—	—	—
Arizona	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Arkansas	—	B	B	B	B	B	B	B	—	—	—	—	—	A
California	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Connecticut	—	B	B	B	—	—	—	—	—	—	—	—	B	—
Colorado	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Delaware	A	—	A	B	B	A	A	A	—	—	—	—	A	—
Florida	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Georgia	B	B	B	—	—	B	—	—	—	—	—	—	—	—
Idaho	B	—	B	—	—	B	—	B	—	—	—	—	B	A
Illinois	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Indiana	B	—	B	B	B	B	B	B	B	—	—	—	B	—
Iowa	B	—	B	B	B	B	B	B	—	—	—	—	—	B
Kansas	—	A	A	B	B	—	—	(1)	—	—	—	—	—	—
Kentucky	—	B	B	B	B	—	—	B	—	—	—	—	B	B
Louisiana	A	—	A	B	B	—	—	A ²	—	—	—	—	B	B
Maine	B	—	B	B	B	—	—	B	—	—	—	—	B	A
Maryland	A	—	A	A	A	—	A	A	—	—	—	—	B	—
Massachusetts	—	A	A	A	A	—	—	—	—	—	—	A	B	B
Michigan	A	—	A	A	B	B	—	A	—	—	—	—	A	—
Minnesota	A	—	A	A	—	—	—	—	A	—	—	—	B	B
Mississippi	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Missouri	A	—	A	A	A	B	B	A	—	—	—	—	B	B
Montana	A	—	A	A	—	—	—	—	—	—	—	—	—	—
Nebraska	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nevada	B	—	B	—	—	—	—	B	—	—	—	—	—	—
New Hampshire	—	—	—	—	—	—	—	—	—	—	—	—	B	—
New Jersey	A	—	A	B	—	—	—	A	—	—	—	—	B	B
New York	—	A	A	A	A	B	B	A	—	—	—	—	A	—
New Mexico	—	—	—	—	—	—	—	—	—	—	—	—	—	—
North Carolina	B	—	B	B	—	—	—	(3)	—	—	—	—	B	—
North Dakota	A	—	A	B	B	—	—	A	—	—	—	—	B	—
Ohio	—	A	A	A	—	—	—	—	A	—	—	—	A	—
Oklahoma	—	—	—	—	—	—	—	—	—	—	—	—	B	A
Oregon	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pennsylvania	B	—	A	A	—	—	—	A	—	—	—	—	—	—
Rhode Island	—	—	—	—	—	—	—	—	—	—	—	—	—	—
South Carolina	A	—	A	B	B	B ⁴	B	A	—	—	—	—	B	—
South Dakota	A	—	A	B	B	—	—	A	—	—	—	—	B	—
Tennessee	—	B	B	—	—	—	B	B	—	—	—	—	B	B
Texas	B	—	B	—	B	—	—	B	—	—	—	—	B	—
Utah	—	A	A	—	—	—	—	A	—	—	—	—	—	—
Vermont	A	—	A	B	—	—	B	A	A	—	—	—	A	—
Virginia	—	A	A	A	A	A	A	A	—	—	—	—	—	—
Washington	—	—	—	—	—	—	—	—	—	—	—	—	—	—
West Virginia	—	A	A	—	—	—	—	A	—	—	—	—	B	—
Wisconsin	B	—	B	B	B	—	—	—	B	—	—	—	B	—
Wyoming	—	—	—	—	—	—	—	—	—	—	—	—	—	—

¹Approved by state architect.

²Also must be approved by the parish health officer.

³Approved by state insurance commissioner.

⁴Equipment is approved for high school only.

TABLE II

Exceptions to universal approval in the various states as shown by School Laws:

Arkansas—Advisory only.
Connecticut—Voluntary approval.
Georgia—Only in cases of state aid.
Kansas—Approval is required "for the erection of schoolhouses of two or more stories."
Kentucky—Approval is required, "except in cities of first, second, third, and fourth class."
Massachusetts—Approval is required of all school buildings "except in Boston."
North Carolina—Approval is required only of buildings "erected in whole or in part from funds borrowed from the state."
New York—Approval is required only "in a city of the third class or in a school district."
Ohio—Approval is required "except in municipalities having regularly organized building inspection departments."
Utah—Approval is required "in any school in the state, not including cities of the first and second class, the cost of which exceeds \$5,000."
Virginia—Approval is required where a state loan is made.
West Virginia—Approval is required "for any and all school buildings to be erected in school districts or independent school districts having a population of 5,000 or less."

specifications. When approval is required it varies from approval of plans and specifications for new buildings to the inclusion of addition to old building, major repairs to old buildings, equipment of new buildings and site.

Let us take the case of Minnesota for example of a state system of control for school housing and equipment. Here is a case where a state has a system for almost absolute control over school housing and equipment. In the office of the State Superintendent there is an Inspector of Buildings and Sanitation. This official must approve plans and specifications for new buildings, additions to the old buildings, major repairs, mechanical equipment only, and building sites. This official also has the power to condemn buildings deemed unsuitable for school purposes. This seems to be the most complete system developed. Several other states approach this, Maryland lacks only in approval of equipment. Of course, the entire efficiency

TABLE III

Agency and official granting approval. (Data from questionnaire.)

Arkansas—(Advisory only) State Supervisor of Buildings and Grounds, from State Department.
Connecticut—Director of Attendance and Employment in State Department.
Delaware—State Superintendent of Public Instruction.
Georgia—State School Supervisors.
Idaho—State Commissioner of Education.
Indiana—State Board of Health.
Iowa—Inspectors of the different classes of schools.
Kansas—State architect approves buildings of two stories or more.
Kentucky—Superintendent of Public Instruction or one of his agents.
Louisiana—State Superintendent after receiving the report of a committee from his department who have studied the plans. Also by Parish Health Officer.
Maine—Commissioner of Education. May delegate power.
Maryland—State Superintendent of Schools and consulting architect.
Massachusetts—Supervisor of plans.
Michigan—State Superintendent for village and city schools; Superintendent of Rural Education for rural schools.
Montana—State Superintendent of Schools and State Board of Health.
Minnesota—Inspector of Buildings and Sanitation from the State Department.
Nevada—Deputy State Superintendent of District concerned.
North Carolina—Director of Schoolhouse Planning in State Department.
North Dakota—Deputy State Superintendent of Schools.
New Jersey—State Board of Education; State Superintendent is secretary of Board.
New York—Director of School Buildings and Grounds; Division of State Department of Education.
Ohio—Division of Workshops and Factories.
Pennsylvania—State Board of Education.
South Carolina—State Superintendent of Education.
South Dakota—Superintendent of Vocational Agriculture from State Department.
Tennessee—Rural School Agent from State Department of Education.
Texas—First Assistant State Superintendent.
Utah—State Superintendent of Public Instruction.
Virginia—Supervisor of School Buildings, from State Department of Education.
Vermont—Secretary of State Board of Health.
Wisconsin—State Superintendent of Instruction, having cooperation of State Industrial Commission.
West Virginia—Supervisor of Trades and Industry, from State Department of Education.

*Not mentioned in questionnaire.

SUMMARY OF THE DATA OF TABLE III

Agency Granting Approval	No. of States
Chief State School Officer.....	26
State Board of Health.....	3
Inspector of Workshops and Factories.....	1
Supervisor of Plans.....	1
State Architect.....	1

of the system depends upon the departments having a sufficiently large and well qualified corps of workers to do this work thoroughly.

A study of the accompanying tables will reveal other systems. Minnesota was chosen as an example as it seems to more nearly approach the idea. Any system to insure good housing and equipment should have final approval of plans and specifications of new buildings. The many poorly constructed buildings are sufficient evidence for this. In one city of over 50,000 inhabitants a contract was let for the erection of a high school building. When the building was nearly completed it was discovered that no provision had been made for heating and ventilation. It is needless to say that no state approval was required in this state. This undoubtedly is an extreme case, but a great many mistakes which might have been avoided with proper approval of plans and specifications, are now interfering with the efficiency of the educational program.

What has been stated above applied to additions to old buildings and major repairs. In the matter of essential equipment the same thing is true. A good instance of this is to be found in an Ohio village where a poor type of heating system was installed. An inexperienced board of education, relying upon its architect, placed in this building a type of boilers utterly unsuited for the purpose. They never were satisfactory. In seven years' time it was necessary to spend \$9,000 to replace them with a proper type. This occurred in Ohio, where approval of equipment is not required.

Some of the best arguments for state approval of sites are found in some of our community fights when a new site is to be chosen. The inadequate sites from the point of view of size are also mute testimonies. This is not alone in cities, but also in villages and rural districts, where no excuse for such a condition exists. In the villages the sites cost little and more land should be purchased. The number of buildings in poor environment—near disturbing noises as railroads, factories, etc., is additional evidence for state approval sites.

No state system would be adequate which did not provide for condemnation of unsuitable buildings. Many buildings are great fire hazards. Others have no evidence of sanitation. Still others are entirely unsuited for educational use. In order to insure proper housing, the state should have the power to condemn and enforce its recommendations.

Another point of importance in a state system to secure proper school housing and equipment is the location of the power to approve. Table II above indicated that the questionnaire replies show that in 26 cases where any state control is exercised, it is exercised by the state educational authorities. This agency should be preferred over the others. It is altogether likely that, say a state board of health, will consider sanitation, heat, light, and ventilation. But will they be able to judge the educational adequacy of a building? It is more likely that this body will not concern itself with this phase of the building. The same is true of the other agencies. In Montana the state superintendent of schools and the state board of health both pass upon the plans and specifications. It would seem that the agency most likely to give the proper inspection and approval would be the educational department of the state.

But in whatever agency approval is located, it should be the major interest of some division of that agency. There should be an adequate staff of persons qualified to give expert opinion on architecture, structure, heating and ventilation, sanitation, and equipment. It should not be placed in some department where it is relegated to an inferior and insignificant place.

TABLE IV—WHAT THE VARIOUS STATES APPROVE

(These data are taken from both law and questionnaire and indicated as in Table I.)

	Plans and Specifications for New Building.	For Addition to Old Buildings	Repair of Buildings	Equipment	Site
Arkansas.....	B	B	B	B	B
Connecticut.....	B	—	—	—	—
Delaware.....	A	—	—	A	A
Georgia.....	B	—	—	B	—
Idaho.....	B	—	—	—	—
Indiana.....	B	—	—	—	—
Iowa.....	B	B	B	B	B
Kansas.....	A	—	—	—	—
Kentucky.....	B	B	B	B	—
Louisiana.....	A	B	B	—	—
Maine.....	B	B	B	—	—
Maryland.....	A	A	A	A	A
Massachusetts.....	A	A	A	—	—
Michigan.....	A	A	B	B	—
Montana.....	A	A	A	—	—
Minnesota.....	A	A	A	B	B
Nevada.....	B	B	—	—	—
New Jersey.....	A	B	—	—	—
New York.....	A	A	A	B	B
North Carolina.....	B	B	B	—	—
North Dakota.....	A	B	B	—	—
Ohio.....	A	A	—	—	—
Pennsylvania.....	A	A	—	—	—
South Carolina.....	A	B	B	B	B
South Dakota.....	A	B	B	—	—
Tennessee.....	B	—	—	—	B
Texas.....	B	—	B	—	—
Utah.....	A	—	—	—	—
Vermont.....	A	B	—	—	B
Virginia.....	A	A	A	A	A
West Virginia.....	A	—	—	—	—
Wisconsin.....	B	B	—	—	—

SUMMARY OF TABLE IV

Agency Granting Approval	No. of States
Plans and Specifications for New Buildings.....	32
Plans and Specifications for Additions to Old Buildings.....	22
Plans and Specifications for Repairs.....	17
Plans and Specifications for Equipment.....	12
Approval of Site.....	10

As one studies this problem in light of the facts of the present situation as revealed above, it is clearly evident that much yet remains to be done. Here and there a few states are attempting to remedy the situation. But for a very large percentage of the states, the problem is yet untouched. If education is a state function, then the state should see to it that proper schoolhouse sites, and equipment are found in all districts in the state.

TABLE V—AGENCIES WHICH CONDEMN SCHOOL BUILDINGS

Connecticut—State Board of Education on Fire Hazard; State Board of Health on Sanitation.
Delaware—State Superintendent of Public Instruction.
Idaho—Department of Public Works.
Indiana—State Board of Health.
Kentucky—Department of Fire Prevention and Rates.
Louisiana—State Board of Health.
Maryland—For Fire Risk Only.
Massachusetts—Department of Public Safety Division of Inspection.
Michigan—State Superintendent of Public Instruction.
Montana—State Fire Marshal.
Minnesota—Inspector of Buildings and Sanitation from State Department.
North Carolina—Insurance Commissioner from State Department.
New Hampshire—State Board of Health.
New Jersey—Commissioner of Education.
New York—Through District Superintendent—Outside of villages and cities.
Ohio—Division of Workshops and Factories.
Oklahoma—State Fire Marshal.
South Carolina—State Superintendent through withholding state aid.
South Dakota—State Board of Health.
Tennessee—Building and Factory or Workshop Inspector.
Texas—State Board of Control.
Vermont—State Board of Health.
Wisconsin—State Superintendent through a state school supervisor.
West Virginia—State Health Committee or State Fire Marshal.

SUMMARY OF TABLE V

Condemning Agency	No. of States
State Board of Health.....	6
State Fire Marshal.....	3
State Chief State School Officer.....	8
Building and Factory or Workshop Inspector....	2
Department of Fire Prevention and Rates.....	1
Department of Public Works.....	1
Inspector of Buildings and Sanitation.....	1
Insurance Commissioner.....	1
State Board of Control.....	1

What Should the Superintendent Expect to Find in the Potentially Successful Teacher?

Prof. Harlan C. Hines, Cincinnati, Ohio

(Continued from May)

V. HEALTH AS A FACTOR

The successful teacher is one who is able to teach his pupils to do more than he himself can do. The very nature of his occupation compels him, no matter what his inclination, to set himself up as an example, as a bearer of information, and as one who has learned how to do. This is a large order. The very act of directing thought and activity carries a responsibility from which there is neither escape nor let-down. On the basis of the estimate that a two-hour public speech consumes as much energy as a day's manual labor, the strength expended by a conscientious instructor during a full day of teaching should equal that required for three or four days of manual toil.

Teaching, therefore, involves a soundness in physical, mental, moral, social, and spiritual health. To reinforce this statement, each of these is treated briefly.

The degree to which physical health is present in the individual owes its existence to three influences—heredity, environment, and training. Assuming that tendencies, rather than diseases, are transmitted by parents to offspring, the teacher may have been endowed with an immunity from the forces of ill health. In instances where this is true environment plays a minor role, and training is not so essential as in the case of those who are so unfortunate as to lack such exemption. Examples of this type are not common, however, and the teaching profession is largely recruited from among those persons whose physical condition has been affected by all three factors mentioned.

As it is encountered, then, good physical health may be attributed to fresh air, a sufficient amount of sleep, and a proper amount, kind and variety of food. Where endowment is weak the environment should have been so selected and conditioned and the conscious training so organized that the child growing to adulthood will have been caused and permitted to overcome, in the highest possible measure, the handicap of negative tendencies. It will have been easier, of course, to build a sound body in those whose native tendencies make response unaffected; in these a state of health approaching perfection may be superinduced by the addition of appropriate exercises.

Teaching is perhaps the most exacting of all professions. Yet there are no professional workers who have greater opportunity to preserve their health and take less advantage of it than teachers. It has been next to impossible to influence them, as a class, to take exercise. They complain that they either do not have the time or are too tired. They fail to see that, after a habit of exercise is once established, more work can be done in less time and that the lack of exercise is one of the causes for fatigue. Yet, highly successful teachers not only find a place for activities that preserve and improve health, but have reserved certain hours for physical exercise from the employment of which they can not be dissuaded. Besides fresh air, proper sleep and food, and regular exercise appropriate to the individual and his occupation, the teacher needs to have and preserve good eyesight, a good speaking voice, feet free from the troubles arising from improper shoes, and needs to establish lessons of cleanliness to be practiced consistently.

There are some teaching positions, of course, such as are found in the special departments of physical education and the manual arts, that require no physical exercise outside the classroom. Certain types of work are good substi-

tutes for the physical activity requisite to good health. Resultingly, in such instances, the emphasis should be placed on mental exercises, for one may become quite slow of mind if not afforded the type of problem that motivates thought without impelling worry.

Mental health is so closely allied with and dependent upon physical health that at times it is difficult to distinguish between the two. This is predominantly true where brain afflictions affect the mental powers, and is true in lesser degree in the presence of diseases that poison the system and influence the functions of the brain indirectly. Again, where intense physical pain is experienced, there is likely to be a weakening of mental grasp. Therefore, for a teacher to have sound mental health, he must have sound physical health; and sound mental health is sure to include the preservation of physical health.

Mental health in the teacher really implies two things. First, he must be mentally alert, and second, he must be sharply and conservatively discriminating. Alertness makes possible but does not guarantee immediate adaptation to new situations, so that it alone is likely to subtract from teaching efficiency unless coupled with sober judgment and clarity of thought. Possessed of these two qualities, the teacher may be expected to plan a schedule that will demand their exercise and, above all, to designate certain goals that will, in their attainment, assure mental growth. The agencies through which these goals are approached may include the simple but progressive program of teaching, public speaking and writing, travel, attendance upon conventions, general but well-directed reading, enrollment in professional courses, and other related activities.

In the matter of moral health, it might be possible for a person to enjoy a high degree of it without an equitable development of physical and mental health, but the contrary condition does not hold; the chances are very much opposed to a development of good physical and mental health where moral health does not exist. When an individual possesses moral health he acts through a sense of right. This we have given the popular name of morality.

In the event that morality is absent, one of two other conditions must be present. Either the individual is immoral or he is un-moral. He is said to be immoral when he violates the moral law, and he may be immoral in any degree from a simple lapse of right conduct to a condition of habitual licentiousness. Moral law, although supported by legal statute, is not so well defined as the latter and there may be serious disagreement in the definition of moral conduct. In the extremes of immoral behavior, however, there is seldom any delay in arriving at a verdict and, in the teaching profession, the recalcitrant, whether temporarily or habitually offensive, is sooner or later punished by dismissal. The unfortunate part of it is that the embarrassing conditions that await dismissal for such cause in almost every case could have been avoided by more careful selection. The potentially successful teacher evidences signs of a philosophy of temperance in all things.

Un-morality in the teacher is more difficult to detect, however. Persons otherwise perfectly healthy may be without a keen knowledge of moral law; they may have difficulty to distinguish between right and wrong, between the beautiful and ugly, or between positive and negative influences in the moral training of youth. Their seeming transgressions are likely

to be nothing more than sins of omission and, in the event that they develop a chronic disregard for the principles of moral law, are or should be, as much subject to discipline as those who more or less openly encroach upon the domain of right conduct with the ill-chosen weapons of immorality.

The teacher is entrusted with the improvement and perpetuation of the social order. He directs the earlier activities of those who are later to become mature subjects to the machinations of society. He needs to know and to be reminded occasionally that social health is founded upon pleasurable reaction. It is up to him, in his guidance of the young, to establish early habits of pleasantness, of unselfish service, of cooperation. These are most easily superinduced by setting example. It is difficult, perhaps impossible, for him to effect desirable results unless he possesses sound physical, mental, and moral health.

The teacher should have learned also the art of mingling agreeably with other teachers and with parents. A wholesome attitude toward persons holding superior and inferior positions should have been developed. And much would be done for the profession if superintendents would be careful to select only those who attempt to cultivate such traits of social adaptability that will make it possible to forever eliminate from the minds of the general public that teaching is a drab profession and that those engaged in it are, at various times, pedantic and mentally parsimonious.

The chief difference between the profession of teaching and other recognized professions lies in the fact that teachers must set themselves up as examples for the young. It certainly is possible to do this and at the same time develop a sound social health that does not set the teacher off as of another species. The young are to be taught to live. How can the lessons of life be imparted if the teacher is unfamiliar with the social activities into which the children must go? Only through well selected periods of temperate participation can such familiarity be established.

Sound social health, as well as physical, mental, and moral health, is not completely possible without sound spiritual health, the presence of the highest and finest qualities of the human mind. Behind all successful teaching must be an animating principle, a pervading influence, that owes its origin to a deep religious sense. It may be thought of as a faith in the goodness of existing circumstances but it should not be so limited. For faith may be of two kinds. There is a faith that is nothing more than a belief. It is quite possible to believe in the broad principles of education, as they are outlined, without possessing a consuming faith that they are the open sesame to the secrets of successful living. Yet somewhere in the background of artful teaching must lie a burning desire to re-present goodness and to implant convictions that, once established, can be shaken only by newer and greater truths.

If the individual considers spiritual health in light of the precepts of Christianity, it takes on the meaning of helpfulness. This is in line with the principles of successful teaching, since helpfulness means service, and service, in turn, is the highest ideal of teaching. Spiritual health, therefore, will have been gained through the daily practice of the lessons of Christianity. Its chief test is fair dealing, based on a faith in outcomes.

(Concluded on Page 157)

Methods of Apportioning Public Funds for Secondary School Support

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The safe custody of public school funds and the protection of such funds from diversion into illegitimate channels are only two of several equally important problems connected with the financial support of public secondary schools. Methods of apportionment of federal, state, and county aid are important influences upon the public secondary school program.

Several questions of outstanding significance might be kept in mind in considering the constitutional and statutory provisions of the various states relative to the apportionment of financial aid from outside sources to public secondary school districts. Does the method of apportionment stimulate the local district to provide improved standards of educational opportunities? Does it make available the advantages of secondary education to an increasing proportion of the population? Does it tend to distribute the burden of financial support in proportion to the financial ability to bear such costs? Does it tend to recognize and reward effort on the part of the local school district?

The federal government recognizes the importance of some of these questions in apportioning federal aid to the vocational education courses in public secondary schools. The Federal Board for Vocational Education, which acts as the administrative agency for the federal government under the "Smith-Hughes Act," supervises the instruction carried on in local communities to the extent of checking by reports and inspection upon the standards of equipment, teachers, curricula, and preparation of teachers. Only a small portion of the federal funds are granted to states as such. Three million dollars annually are allotted to the states as aid for the teaching of agricultural subjects in the proportion that the rural population of each state bears to the rural population of the United States. A similar amount for aid to trade, home economics, and industrial subjects is allotted to the states in the proportion which their urban population bears to the total urban population of the United States. If any portion of a state's allotment is not spent for the purpose specified, a like amount is withheld by the Federal Board from the next year's apportionment. The aid is allotted to the states, then, on the basis of the need in terms of population. It is redistributed to local districts as rewards to local effort.

The federal government wisely requires local or state financial participation in the support of the vocational education program of at least as much as the federal subsidies, if the state or local community wishes to share in the federal aid for such instruction. The federal aid may be used only for the training of teachers, the payment of teachers' salaries, or the proper supervision of the program.¹

The authority and duty to apportion state aid to public secondary schools is delegated to the state superintendent or commissioner of education in most of the states.² In the performance of this duty the state superintendent possesses discretionary powers; and may, therefore, withhold apportionment from a school district which reports average daily attendance on a basis not authorized by law or the rules of the state board of education,³ or when a school district seeks an apportionment of state aid for sessions maintained at a time not authorized by law.⁴ The state superintendent of public instruction also possesses full authority in harmony with the

state laws. The state treasurer may, therefore, be required by mandamus to pay out public funds in the state treasury, set aside by law for the support of public schools, upon the apportionment made by the state superintendent of public instruction.⁵ The state auditor may also be required by mandamus, if necessary, to issue warrants to counties or local school districts in accordance with the direction and report on apportionment of the state superintendent.⁶ Public officials who handle the public school funds in their distribution from the state treasury to the local secondary school district act as agents of the state.⁷ A like decision of the Texas supreme court sustains the powers of the state superintendent of public instruction by issuing a writ of mandamus against the state comptroller to compel him to draw his warrant on the public school funds in accordance with the superintendent's certificate of apportionment.⁸

Two states provide by statute that the state comptroller shall apportion the state aid to public secondary schools.⁹ He is given discretionary powers in apportionment similar to those of state superintendents of other states. Thus a teacher, in the name of the county, was refused a writ of mandamus for the purpose of securing his own salary. This case did not decide, however, that the proper county officials might not succeed in a similar suit.¹⁰

Although it is doubtful whether the method will justify an affirmative answer to the questions propounded in the introduction to this paper, 26 states still provide for state aid to be apportioned upon a basis of the number of children of school age within the school district.¹¹ An early court decision held that the statutes in New Jersey at that time did not authorize the recall and reapportionment of public school funds after having been apportioned to the local district upon the basis of a false and fraudulent census report by the board of trustees.¹² A recent court decision in Utah, however, shows that means are now being used to prevent any such unjust apportionment by directing the state superintendent of public instruction to correct erroneous apportionments when apportioning school funds for the subsequent year.¹³

Average daily attendance as a basis of apportionment seems to serve better as a reward to effort in providing educational advantages. Sixteen states include this basis as a method of apportionment of state aid.¹⁴ Such apportionments are made on the basis of average daily attendance upon public schools only. According to a recent Missouri decision, if the state apportionment is based upon erroneous reports from local districts, the correction is to be made in the subsequent year's apportionment.¹⁵ Nine

states also use average daily attendance as a basis for state aid to evening schools,¹⁶ while five states use a similar method in aiding part-time continuation schools.¹⁷ A ruling by the California State Board of Education, which interpreted one two-hour session attendance upon evening classes as equivalent to one-half a day's attendance for purposes of state aid, has been sustained by the California supreme court.¹⁸

One of the most significant statutory provisions of the states relative to bases of apportionment of state aid is that providing for a special equalization fund to aid local districts that are poor in property valuation and other sources of revenue.¹⁹ The supreme court of North Carolina supported this statutory provision in a 1919 decision.²⁰ Other significant bases of apportionment of special aid are: To the secondary school as an institution;²¹ to special types of secondary schools;²² to special types of instruction in secondary schools;²³ on the basis of the number of properly qualified teachers provided;²⁴ and as rewards for local districts giving special, free accommodations to students, such as tuition,²⁵ transportation,²⁶ or special services by school employees.

Three states grant special state aid on the basis of school enrollment.²⁷ The supreme court of Indiana has ruled that if a student has been counted in the report of enrollment sent to the state office for the year's apportionment, he can not be excluded from the school during that year because he resides outside the city limits.²⁸ The supreme court of Maine held that an apportionment law, which distributed one-third of the public school aid by the state superintendent of public instruction on the basis of school enrollment and two-thirds on the basis of valuation of districts, was constitutional even though "benefiting the richer towns more than the poorer."²⁹ It is significant that the Maine legislature has changed the bases of apportionment by revisions of 1921 and 1923 so that the state now grants special aid to normal training and other special subjects, gives aid on the basis of the number of properly qualified teachers provided, apportions special aid where free tuition and other special services are given to students, provides a special equalization fund to aid the poorer districts, and distributes the remainder of the fund on the basis of average daily attendance. The provision for apportionment in proportion to valuation of the school district is now eliminated. Truly, these are changes that are potent factors in developing better educational opportunities for the children of the state.

The constitutionality of a statute providing special aid for a special type of school (consolidated) has been sustained.³⁰ The courts of several states have concurred in ruling that a local school district is not entitled to share in

¹State of Washington ex rel School District No. 301 v. Josephine Preston, Supt. of Pub. Instr. (1915), 84 Wash. 79, 83, 87, 146 P. 175.

²The State of Nebraska ex rel J. M. McKenzie v. J. C. McBride, State Treasurer (1876), 5 Nebr. 102, 103.

³The State of Washington on the Relation of T. J. Tanners as Treasurer of Jefferson County v. Neal Cheatham, State Auditor (1900), 23 Wash. 606, 607, 63 P. 552.

⁴School City of Terre Haute v. Harrison School Township of Vigo County (1915), 184 Ind. 742, 751, 752, 112 N. E. 514; School City of Terre Haute of Vigo County v. Honey Creek School Twp. of Vigo Co., et al (1916), 184 Ind. 754, 112 N. E. 518.

⁵Jernigan, County Treas. v. Finley, Comptroller (See key number 1500, Summary Chart XVI, post.

⁶E. A. Yost, Ex'r. v. James L. Gaines, Comptroller (1882), 78 Tenn. 466, 458.

⁷(1896), 90 Tex. 205, 38 S. W. 24.

⁸See key number 1475, Summary Chart, post.

⁹The Inhabitants of the Township of Morris, in the County of Morris v. Amzi-Carey, Silas H. Arnold, and Lewis H. Johnson (1859), 27 N. J. 377, 387.

¹⁰Board of Ed. of Alpine School Dist. Utah County, et al. v. Bd. of Ed. of Salt Lake City, et al. (1923), 62 Utah 302, 219 Pac. 542, 543.

¹¹See key number 1483, Summary Chart, post.

¹²State ex rel Consolidated School District No. 9 Bates Co., et al. v. Lee, State Supt. of Schools (1924), (Missouri Supreme Court) 262 S. W. 344, 346.

¹³See key number 1485, Summary Chart, post.

¹⁴See key number 1503, Summary Chart, post.

¹⁵Board of Education of the City and County of San Francisco, Petitioner, v. Edward Hyatt, as Supt. of Pub. Instr., Respondent (1912), 163 Cal. 346, 352, 126 P. 751.

¹⁶See key number 1487, Summary Chart, post.

¹⁷Board of Education of Alamance County v. Board of Com'rs of Alamance County (1919), 178 N. C. 305, 100 S. E. 698-700.

¹⁸See key number 1488, Summary Chart, post.

¹⁹See key numbers 1474, 1477, 1495, Summary Chart, post.

²⁰See key number 1496, Summary Chart, post.

²¹See key number 1490, Summary Chart, post.

²²See key number 1492, Summary Chart, post.

²³See key number 1491, Summary Chart, post.

²⁴See key number 1494, Summary Chart, post.

²⁵Edwards et al Trustees of the School City of Peru v. State, ex rel Kesling (1895), 143 Ind. 84-86, 42 N. E. 525.

²⁶Herbert J. Sawyer v. Pascal P. Gilmore, State Treasurer (1912), 160 Me. 169, 176, 178, 83 A. 673.

²⁷State ex rel Clark et al v. Gordon, State Auditor (1914), 261 Mo. 631, 170 S. W. 892.

¹Senate Bill 703, Sixty-fourth Congress, Feb. 23, 1917.

²See key number 1473, Summary Chart, post.

³San Francisco v. Hyatt, Supt. of Pub. Instr. (1912), 163 Cal. 346, 125 P. 751.

STATE	YEAR	1527	1528	1529	1530	1531	1532	1533	1534	1535	1536	1537	1538	1539	1540	1541	1542	1543	1544	1545	1546	1547	1548	1549	1550	1551	1552	1553	1554	1555	1556	1557	1558	1559	1560	1561	1562	1563	1564	1565	1566	1567	1568	1569	1570	1571	1572	1573	1574	1575	1576	1577	1578	1579	1580	1581	1582	1583	1584	1585	1586	1587	1588	1589	1590	1591	1592	1593	1594	1595	1596	1597	1598	1599	1600	1601	1602	1603	1604	1605	1606	1607	1608	1609	1610	1611	1612	1613	1614	1615	1616	1617	1618	1619	1620	1621	1622	1623	1624	1625	1626	1627	1628	1629	1630	1631	1632	1633	1634	1635	1636	1637	1638	1639	1640	1641	1642	1643	1644	1645	1646	1647	1648	1649	1650	1651	1652	1653	1654	1655	1656	1657	1658	1659	1660	1661	1662	1663	1664	1665	1666	1667	1668	1669	1670	1671	1672	1673	1674	1675	1676	1677	1678	1679	1680	1681	1682	1683	1684	1685	1686	1687	1688	1689	1690	1691	1692	1693	1694	1695	1696	1697	1698	1699	1700	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710	1711	1712	1713	1714	1715	1716	1717	1718	1719	1720	1721	1722	1723	1724	1725	1726	1727	1728	1729	1730	1731	1732	1733	1734	1735	1736	1737	1738	1739	1740	1741	1742	1743	1744	1745	1746	1747	1748	1749	1750	1751	1752	1753	1754	1755	1756	1757	1758	1759	1760	1761	1762	1763	1764	1765	1766	1767	1768	1769	1770	1771	1772	1773	1774	1775	1776	1777	1778	1779	1780	1781	1782	1783	1784	1785	1786	1787	1788	1789	1790	1791	1792	1793	1794	1795	1796	1797	1798	1799	1800	1801	1802	1803	1804	1805	1806	1807	1808	1809	1810	1811	1812	1813	1814	1815	1816	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	1837	1838	1839	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524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Reliability of College Credentials

Supt. G. W. Greene, Buckley, Wash.

One of the most important problems which a superintendent must solve in the spring each year is the selection of new teachers to replace those who leave his corps. The large systems with their "two years' experience" rule select those teachers of proven ability. The small town becomes the starting point where inexperienced college graduates enter the teaching profession; consequently, the probable success of a first year teacher is of prime importance to the superintendent in a small town.

Undoubtedly, one of the chief factors in the selection of a college graduate for his first teaching position is the copy of "credentials" made up from recommendations from his college professors and mailed by the vocational bureau of the institutions of higher learning. In an effort to discover the reliability of the various recommendations embodied in a typical university credential, the writer has computed the correlations existing between the recommendations for 103 graduates before they taught, compared with their success when measured by town superintendents after the first year of teaching.

The institution of higher learning selected for this study was the University of Washington. The placement secretary of the institution was asked to select as many graduates as possible from those who had taught one year, and whose credentials contained recommendations from interested persons and in addition all-university intelligence test ratings, together with computed percentages of college grades earned while in school.

Since the writer wished to use the "Pearson Method Adapted to Rank Differences," it was necessary to find the relative position of the same individuals in paired series of rankings. In order that such paired series of ranking could be made, use was made of the present university scheme of assigning numerical values to grades—called grade points—11 points for superior rating; 8 points for good; 4 points for average; 1 point for fair, and —4 points for poor. As the professors concerned had rated their pupils on the same factors that the superintendents used—personality, cooperation, industry, personal appearance and scholarship—a fine basis existed for comparison. After computing numerical values, the teachers were ranked according to a scheme which allowed four ratings of the order designated and one inferior rating—e.g., superior or rating No. 1, implied that the teacher had four superior ratings and one rating of good or better.

The classes were:

- Class 1—10.4 points up.
- Class 2— 7.2 to 10.3
- Class 3— 3.4 to 7.1
- Class 4— 0 to 3.3
- Class 5—Below 0.

In determining the ranking in intelligence tests, a slightly different plan was followed. The university statistics had been used to rank all the university students according to their intelligence tests from 1 to 100—called an all-university ranking. For the purposes of this study, they were regrouped as follows:

- Class 1—90 to 100 in All-University Intelligence Ranking.
- Class 2—80 to 89
- Class 3—60 to 79
- Class 4—30 to 59
- Class 5— 0 to 29

On the basis of their conformance to these various classes, rankings were then made for 103 University of Washington graduates who had had at least one year of experience on the basis of intelligence tests, grades made during

four years of college work and evaluations of the following—critic teachers in charge of practice teaching, training professors in charge of practice work; major subject professors, minor subject professors, professors of other subjects, school clerk and superintendents who had supervised the first year of teaching.

		Example						
Teacher	All-U Test Rating	Grades	Critic	Tr. Prof.	Maj. Prof.	Minor Prof.	Prof.	Supt.
H.D.	2	3	2	1	1	1	1	1
T.C.	3	3	2	1	2	1	2	1

Pairing all rankings with those of the superintendent as the standard, correlations were then computed using this formula:

$$r = 1 - \frac{N(n^2 - 1)}{6S(D^2)}$$

Where $S(D^2)$ is the squared differences in rankings, N is the number of cases considered and n is the number of ranks used—namely, Superior, Good, Average, Fair, and Poor.

Table of Results. Correlations of Recommendations For Graduate with Reports from Superintendents after One Year of Teaching

No. Considered	Types	Rank Differences	Coefficient of Correlation
79	Clerks	47	28
70	Professor	34	29
76	Minor Prof.	39	32
97	Major Prof.	47	44
80	Tr. Prof.	45	33
67	Critic Teacher	26	35
103	GRADES	30	57
103	All-U intelligence Tests	16	42
390	Total of first six items	287	79

A survey of the table of results discloses that there is a high positive correlation existing between the various factors studied, ranging from .21 for intelligence tests, to .87 for the training professor. While it is true that the professor in charge of the training of prospective teachers has the highest correlation with the ranking of the superintendent after the student has had one year of teaching, recommendations of major professors, minor professors, critic teachers, and others are almost as close. Indeed the positive correlation of .79 for the judgments of the 390

different people and the 103 superintendents is indicative of the worth of a credential. The poorest criterion of success seems to be that of intelligence tests and the next poorest that of grades made while in school.

The study seems to show that school boards and school superintendents of small towns may be safe in relying upon the recommendations of those who have had charge of the training of applicants during college days. It seems to show that the college "credential" should

have considerable weight in the placement of a teacher.

A number of other interesting points were brought to light in the working out of the study. Of the 103 teachers selected at random from the University of Washington's live files, 26 per cent were rated as superior by superintendents, 57 per cent as good, 11 per cent as average, three per cent in the fair group and only one per cent constituted failures.

Of the 27 teachers making a rating of one or Superior in their first year of teaching, only five were in Class 1 in intelligence; not one in Class 1 according to grades earned while in university; only four were rated one by their critic teachers, nine by their training professors, only four by major professors, five by minor professors, and five by professors of other subjects showing that a tendency exists on the part of college professors to under-rate those who later become superior teachers.

In the case of the average, fair and poor teachers, many times a little hint was dropped under the head of remarks which in spite of good grades or splendid intelligence explained lack of success later. Among these stumbling blocks to success were, "queer," "sullen," "egotistical," and frequently, "does not possess much self-confidence."

It is the belief of the writer that a typical college credential may be safely followed by the small town superintendent, for the probable success of a college graduate in his first year of teaching is carefully indicated.

School Building Maintenance

Part IV—Accounting (Continued)

H. E. Ramsey

The two types of orders described in last month's article covered the getting of the job to the man. Now, as soon as the order has been received, and work is started, there is a consumption of time and material. It will be necessary, therefore, to take up the time card next.

The Time Card

Until the maintenance department has grown too large, it is well for each man to make out his own time. It serves as a sort of a daily "billing" of the time the man has actually put in, and bearing his signature it is incidentally an urge for honesty; and in case of error, he has only himself to blame. When each man makes out his own time considerable work and time are saved for the foremen. The foremen should be required to check the cards and turn them in to the office. In this way there is a check on the possibilities of a man getting the wrong number, and is necessary because the girl in the office does not know where the men are, except the foremen.

The sample cards are for Sam Jones, an electrician, Dept. 3, and Tom Keeton, the truck driver, Dept. 5. Note that the department has completed its portion of Job No. 6241. He also worked that day on two standing account numbers, of these, 6026, we will say, was trouble

with the bells at the Van Buren school (the order being a note to that effect) and 6020 was, say, motor trouble at the Polk school (a confirmation note—the call relayed to him while he was at the Van Buren school). Job No. 6238, was some other B-order which he completed the 14th. Note that standing account numbers are not entered as completed, because they are not closed until the end of the fiscal year.

Tom Keeton's card shows that he spent 1½ hours trucking desks to the Washington school on B-order, 6241. When he left the shop he had the strips for fastening down the desks with him and completed his work all in one trip. This is a correct charge, as delivering desks is not a daily job and is properly chargeable to the installation job.

In the Topeka schools we established the accounts of 6030, 6031, and 6032, from which it is possible to determine whether or not a small truck will be needed for say trucking manual training supplies or teachers' supplies. It also provides a check against the possible economy of having this class of work done by regular cartage companies. These last two items are of more or less regular occurrence and practically uniform mileage, so that a comparative

(Continued on Page 104)

The Need for Developing Technique for the Superintendency of Smaller Schools

R. V. Hunkins, Superintendent of Schools, Lead, So. Dak.

The first school superintendents appeared in the big cities. Therefore, the time for perfecting the technique of city school administration has been longer than that for developing a similar technique for the smaller schools. Furthermore, the cities have been able to pay salaries sufficient to hold strong superintendents and to attract from the smaller places those of promising ability. The smaller superintendencies have been left very largely for the beginners and those who, for various reasons, are unfitted for, or undesirous, of positions in bigger places. The cities, too, have greater facilities for recording the results of administrative effort for general reference. Courses of study, annual reports, surveys, rules and regulations, and the other output of the offices of city superintendents have been made available in printed form. One city superintendent has thus been able to learn what others have been doing with at least a part of the problems involved. For the smaller schools, on the other hand, there has been an extreme dearth of such reference material.

Again, the general literature of educational administration has taken its departure almost exclusively from the problems of big school systems. As far as the writer can learn there are but two small volumes published, definitely devoted to the problems of management in smaller schools. Periodical literature is likewise chiefly concerned with the problems of city schools. The "SCHOOL BOARD JOURNAL" is the only national school magazine that makes a practice of printing articles treating the problems of administration in smaller school systems.

All these advantages of school superintendency in larger places are but natural to the present-day ascendancy of cities. The cities have had great opportunities. Among them has been the opportunity to adapt the educational systems to their needs, including the development of appropriate administrative technique. These accomplishments are not to be envied. As the results of natural advantages, neither are they to be attributed to any superior devotion on the part of those in charge of large city systems. Rather they should stand as a challenge to the great army of men and women in charge of smaller schools to adapt those schools to the conditions existing in smaller communities, including the perfecting of efficient managerial technique for themselves. If there are more obstacles in the way than for larger places, so much the greater are the opportunities for unusual achievement.

The Importance of Small Schools

There are a number of considerations that make the need for accumulating and organizing technique for the management of smaller schools extremely important. In the first place, an overwhelming majority of superintendents are in charge of what must be classed as smaller school systems. According to data in a recent pamphlet there are 7,944 communities in our country with populations between 500 and 5,000.¹ There are but 1,469 centers larger than 5,000. That is to say that 84 per cent of the centers larger than 500 do not exceed 5,000. If places smaller than 500 are ignored, the dividing line between large and small places is put at 5,000, and each place is assumed to employ one superintendent of schools, the ratio is five to one in favor of the number of superin-

tendents in smaller communities. It would seem that the dividing line could not be placed at a population of less than 5,000 and it might be placed much higher than that.

No matter where it is placed within reason, the ratio will be decidedly in favor of the number of superintendents in smaller schools. Not only do the smaller superintendencies surpass in numbers, but they serve more than half the population of the country. Figures from the pamphlet quoted above show that 55 per cent of our population live in communities of 500 to 5,000 in size, to say nothing of those who live in still smaller communities with schools in charge of somebody. From the standpoint of the number of superintendents employed and the number of people served, it can certainly be said that the administration of smaller schools is an extremely important matter.

Library Helps Lacking

It would seem, too, that if any need guidance it would be the inexperienced and otherwise less able superintendents who hold most of the positions in smaller places. One time when the writer was confronting the problem of managing a school in a town of 2,500, he chanced to take from the library of a physician one of a large number of volumes there. The volume opened to a ten or twelve-page treatise on the transfusion of blood. The explanations were lucidly illustrated with pictures. The directions were so complete and explicit that it seemed a novice under their guidance could not fail. The writer thought how wonderful it would be if he could go home to his own library and find some concrete suggestions on how to "transfuse" new life into a worn-out teacher, or "operate" on a case of low salary schedule. Though he held degrees from the education departments of two prominent universities, he had nothing in his library that would give him more help than a doctor about to set a broken limb would get from a book on the relation of medicine to chemistry.

The beginner in the well-established profession of medicine or of law must have a library. From this library he gets counsel that is indispensable in the performance of his daily tasks. The beginner in the practice of school superintendency, at least in smaller places, can have no such library because there is none to be had. Many superintendents have solved the problems involved, by trial-and-error methods, but they have left no records. The cases have never been written up and compiled. Each learns at the heavy cost of his own experience. Yet, all face the same large group of typical problems. They hire teachers, deal with boards of education, supervise teachers, plan buildings,

INFORMATION AND EDUCATION

"We have all met persons possessed of a wonderful fund of information which did not seem to influence their lives. Information must be assimilated until it becomes a part of the individual's thought which later will be expressed in action. We sometimes find children who look upon their work in school as something which they must do for the teacher. Their whole attitude is completely changed when through skillful teaching they come to understand and to accept the fact that they are doing their own work and that the teacher is a wise guide and counsellor. When children have gained this conception of their school work, education begins. Under the other conception they may gather information but they never become educated.—Ward C. Moon, Superintendent of Schools, Poughkeepsie, N. Y."

organize courses of study, select textbooks, prepare budgets, manage inter-school relations, and perform the other required tasks of all superintendents.

Some have an agility for adaptation that saves them from failure. Others have good luck. Many fail. But none profit in any adequate way from the lessons learned by others. If the successful methods learned by one could become the possession of all, the chances for victory under strain would be much greater, and the calling of superintendent of smaller schools would be on the road to the goal of a genuine profession.

That superintendents are eager for information about what others are doing is proven by numerous questions that come by mail to every school superintendent's desk. They ask how you organize your students' association, how you manage medical inspection, who does the janitor work, how you obtain substitute teachers, whether you employ married women for teachers, and how you do this and how you do that. They want copies of your course of study, your annual report, your blanks for permanent records, and "any other printed forms that you happen to use." Such requests are additional proof of the need of a storehouse of information for school executives in smaller places.

City Imitation as an Evil

An unfortunate result of the lack of guidance material for the administration of smaller schools is the curse of city-imitation in small-school procedure. The cities have been foremost in school progress. Their success has been widely heralded. The smaller places have had an aspiration to do things in a big way. This aspiration and the want of better guidance has led them to adopt city school practices, without due consideration for their adaptability to local needs and conditions. The textbook agent's strongest argument for the sale of a book no matter how small the place, is that the book has been adopted in New York and Chicago. So-called junior high schools have been instituted in many small communities, no doubt, not because of any genuine appreciation of the purposes of a junior high school but because all the big cities are building them.

One superintendent of the writer's acquaintance effected the adoption of a scheme for paying the teachers in a small place in twelve monthly installments instead of in nine, without increasing the annual salary. His argument was that he had learned that most of the large cities did it that way. The plan was soon dropped, however, because the teachers were so scattered during the summer months that it was too difficult to send the money to them. The cases of city-imitation are so prevalent that further instances need not be cited.

It is probably true that the smaller schools can learn many things from the experiences of city schools. To adopt these city practices, however, without carefully examining them as to suitability is, to say the least, an inefficient procedure. There are important, if not fundamental, differences between large and small school systems that make differences in educational methods necessary. The small school is primarily rural in nature. It requires different courses, different equipment, and different illustrative materials. The approach to learning must be different in order to meet the requirements of apperception. The teachers need to have a sympathy and appreciation for rural life.

¹"Latest School Statistics." Compiled February 1, 1926.

Difference in Administration

The problems of administration are also different. The superintendent is closer to the classroom teachers, the pupils, and the patrons. He is not so much a director of experts in the way of highly trained supervisors and assistants as the superintendent in a city system. The small system has less inertia than the larger one. It is therefore affected seriously by smaller forces. It responds more directly to the touch of the guiding hand. It will fall to pieces more promptly when the vigilance of the overseer is slackened. The leaders with whom the superintendent must work are apt to have a lesser educational inheritance in a smaller place because of the more limited chances for selection. These leaders for the most part, too, are apt to be connected with smaller business and industrial enterprises and not so used to doing things in a big way. The result is a probably greater degree of conservatism for the head of the schools to cope with.

The foregoing differences, along with others that might be mentioned, point clearly to the conclusion that those in charge of smaller schools should have their attention upon the needs of the smaller schools, and not upon the school practices of cities. They must attempt

to solve their problems in the light of an analysis of conditions that actually exist, and not in the darkness of city-imitation.

In summarizing, it may be said that an overwhelming majority of school superintendents work in small school systems. They serve half or more of the population of the country. They are for the most part the less experienced and less able school executives of the country. They need the guidance of standardized managerial technique. They need this because of their inexperience and limited ability, because they show by numerous inquiries that they feel the want of it, and because other callings have been established as professions by the accumulation of appropriate technical knowledge. The need is further substantiated by the ineffective, if not dangerous, practice of city-imitation in smaller-school administration.

These reflections lead to the conclusion of this article which is that those in charge of the smaller schools should unite in an effort to pool their successful experiences and establish a reliable body of technical knowledge about the management of smaller schools for the ready reference of all concerned. How such a task might be performed will be the theme of a future article.

The Function of a School Board

Dr. J. O. Engelman, Superintendent, Terre Haute, Ind.

Virtually everything that is now done by a good superintendent of schools anywhere was once done, or attempted, by members of school boards, but school administration has gradually changed with passing years and there has grown up a generally accepted but different view of what constitutes the largest service a school board can render. While school boards in general no longer attempt to take the place of an expert, they do have many and important duties to perform.

The service that a school board can render when its individual members are broadminded, progressive, tolerant and free from either political, sectarian or other narrow interests and influences, is not surpassed by that of any other community worker. Very few public servants have the opportunity to render a service that is farther-reaching or more enduring. While a board member will always be subject to some hostile or unjust criticism, regardless of how wisely or unselfishly he serves, there is compensation in knowing that the best people of his community will sooner or later recognize the worth of his service and commend him for it. Furthermore, there must be an inner satisfaction in knowing that one has through his services, helped to make the schools of his city contribute more largely to the development of manhood and womanhood, the nobler qualities of character, the finer types of intellectual life, and other elements that make for good citizenship on the part of children and youth in the schools.

Technical Training

In recent years, superintendencies have come to be recruited more and more by men whose training is as technical and as extensive as that required to fit men for medicine, law or other professions. As a result of their special insight into problems of school administration and their extended training for such service, they are everywhere expected to take the initiative in dealing with all purely educational matters, but the school board is primarily still a board of school control.

Its duty is to determine policies, to consider and determine the extent of school expenditures. Responsible to the people, it must deal in a broad way with matters of business and finance, while it may rightly expect and even demand, information from the superintendent

and his associates as to the need for new buildings, additions to old ones, the purchase of new sites, or the expansion of the city's educational program. It must weigh all these matters in terms of their cost, the city's need and the community's ability to finance them. Its combined large experience in matters of business and finance should enable it to pass a group judgment upon recommendations of the superintendent and his associates, and upon all such matters that will be of great value to the community.

Must Pick Right Man

There is almost universal agreement that the most important single duty of the board of education is to select the right type of man and the right man, indeed, as superintendent of schools, and then to support him in the discharge of his numerous and difficult duties. It



MISS EVANORE O. BEEBE

For twenty-one years, Miss Beebe has been a member of the school committee of Wilbraham, Mass., and has in all been identified with school work for forty-seven years. She has pink cheeks and white hair, and lives in a New England farm home that was known as Mixer Tavern and was built more than one hundred years ago. Although of New England parentage Miss Beebe is a product of Wisconsin. During her girlhood days she came back to New England and in 1879 began the career of a teacher at \$6.50 a week. Twenty-odd years ago she retired as a teacher, but held her interest through a school board membership to which she has been successively elected by her townsmen. During this period she has introduced many modern innovations, and has never failed to keep the school system, with which she was identified, abreast with the times. She is an interesting character and is beloved because of her delightful personality.

should be stated frankly that the right support of the superintendent is not less important than the right selection of the man for the place. For a superintendent to select a teacher and then by disparaging remarks, unfavorable comments and frequent criticisms of her among the patrons and parents or to the children, would be fatal to her success and unpardonable on the part of the superintendent.

In exactly the same way and for exactly the same reasons, it is fundamental that the superintendent have the confidence and the support of every member of his board so long as he is in office. When he no longer merits such confidence and support, he should be discharged at once. If principals, teachers, supervisors or citizens have a genuine grievance against the superintendent, it is their privilege to make it known to members of the board and the board's later duty to determine the justice of the criticism or complaint and to act accordingly, but it is fatal to good school administration to court criticism from fault-finders and to break down confidence by innuendo.

Functions Legislative

All educators and most school boards agree today, that the board's powers and functions are largely legislative and judicial, and that these functions have in no way been lessened nor the board's influence curtailed by a surrender of things that are purely professional.

A recent editorial in the American School Board Journal states that "the over-zealous school board member may rise and say, 'If the superintendent appoints all the teachers, selects all the textbooks and makes the courses of study, what is there left for the school board to do?'"

The editorial answers the question by quoting from a school survey report issued at Portland, Ore., which says, "This course leaves the board free alike from the petty details of school administration, with time to devote to the larger problems of its work. These relate to the selection of its expert advisors upon which much time and care should be spent; the larger problems of finance, present and future; the selection of school sites always with future needs and growth in mind; the approval of building plans; the determination of the budget of expenses; the final decision as to proposed expansions and enlargements of the educational system; the prevention of unwelcome legislation by the city or by the legislature; and the representation of the needs and policy of the school system before the people of the city and of the state. These larger needs are far more important, but are almost sure to be neglected, if a board of school directors attempts to manage too minutely the details of school administration."

Calls for Firmness

The same editorial, appearing in November of last year, says further, "It is quite natural that there are members on boards of education who, in a meddlesome spirit, seek to invade the prerogatives of the professional factors. In instances of this kind, the superintendent must be clear as to the real function of his office. He must be self-assertive and self-reliant in holding to the accepted fundamentals of modern school administrative service."

"The duties which come legitimately within the province of a properly constituted board of education, ought to keep that body sufficiently busy to make all excursions into the professional field undesirable. But if this were not so, it still remains that the purely educational labors must be left to those specially fitted to perform them."

—Mr. F. E. Beck of Olympia, Wash., has been elected superintendent of schools at Burlington.

—Mr. H. D. Thompson of New Plymouth, Ida., has been elected superintendent of schools at Wendell.

THE SELECTION OF INEXPERIENCED TEACHERS

—Supt. W. C. McGinnis of Revere, Mass., in his annual report for the year ending December 31, 1925, devotes some attention to the policy of electing inexperienced teachers who are graduates of normal schools and colleges. Mr. McGinnis believes that the effects of this policy are bad, and he points out that during the last two years it has resulted in bringing to the schools of Revere a larger percentage of new teachers who are inexperienced than into any other Massachusetts city.

Mr. McGinnis holds that principals should not be given too many inexperienced teachers, because no inexperienced teacher can justly or accurately be termed a good teacher from a professional point of view, any more than a young lawyer who has never prepared a brief or tried a case in court can be designated a good lawyer. If an undue amount of a principal's professional efforts must be devoted to the task of making good teachers out of inexperienced teachers, Mr. McGinnis argues, there is too little time left for the job of making excellent teachers of those who are already good teachers. He writes as follows:

"We have too many inexperienced teachers in our schools now, and if the present policy is continued the number of inexperienced teachers will increase from year to year and the number of poor teachers also. Some girls who are not qualified to enter the state normal schools because they do not meet the educational standard of the state, are entering the private normal schools. In my opinion, the professional training of students in the private normal schools is much inferior to the training in state schools. A smaller amount of training and a lower standard of admission requirements naturally tend to produce an inferior type of teacher.

"Under the present policy, local residence is the most important qualification a candidate can have. Anything which restricts the free choice and selection of the best teaching material wherever found is detrimental to the welfare of the schools and to the community. Other things being equal, preference should be given to local teachers, but it should be understood that local residence is not of sufficient importance to be rated as equivalent to ability, training, and experience.

"I have no sympathy with the policy of some cities in not accepting any inexperienced teachers. Teachers must get their experience somewhere, and I do not claim that state normal trained teachers are the only good teachers. Some of our best elementary teachers are not products of the state normal schools, but they are the exceptions because of their personal ability.

"Revere and other cities should learn the lesson that the public schools are not maintained for the purpose of providing jobs for teachers. They are maintained for the purpose of producing good American citizens. No superintendent of schools that I know is opposed to appointing local teachers who are qualified to do good work. In fact, local residence, other things being equal, makes a teacher more valuable to the school system in which she is working, and I am in favor of giving preference to local candidates for teaching positions."

A CERTIFICATE OF SCHOOL BOARD SERVICE

The thought of expressing recognition for faithful board of education service in some formal manner, has found acceptance in Illinois. At East Moline, the united township high school district honors its retiring school board members with a certificate which notes their term of service and recognizes faithful and efficient service.

The Board of Education Administration and Faculty

of the
United Township High School
District
East Moline, Illinois

Recognize in

L. F. Haemer

A Public Servant of high order, and unite in subscribing the names of their official representatives to this expression of appreciation of all services rendered by him during the 13 years he has served as a Member of the Board of Education, and fellow worker for the common good.

Education has had in this man a consistent friend and promoter; the work of community building and future citizenry has gone forward with commendable accomplishment throughout the period of his membership, and he retires with a record of having made a valuable contribution to the world's treasury of goodly things.



John W. Casto President of the Board of Education
John W. Casto Superintendent
Edna L. Patterson Preceptress

CERTIFICATE OF SCHOOL BOARD SERVICE ISSUED BY THE EAST MOLINE, ILL., BOARD OF EDUCATION.

The certificate is issued in the thought that the person who through the medium of membership on a board of education is promoting the mental, moral, and physical welfare of the child, is also rendering a most valuable service to the country at large. The training for that citizenship which is so essential to the stability and well-being of the Republic, implies a duty, a high character.

The compensation which comes to a member of a board of education is not expressed in the dollar mark. It must be found in a consciousness of a fine task well performed. A certificate of useful citizenship is more eloquent, more lasting, more typically American. To contrib-

ute to the progress of the community, as an integral part of the larger unit, means to contribute to the prestige, prosperity, and power of the nation.

The certificate issued by the East Moline school authorities was devised by Superintendent John W. Casto, of the united township high school located at East Moline. The board has thus far issued six certificates. L. F. Haemer has served for thirteen consecutive years which constitutes the longest term thus far served. The certificates are signed by the president of the board of education, the superintendent of schools and the preceptress who is the ranking teacher and the girls' sponsor.

Words of Counsel to School Boards

In the Education Bulletin issued by the New Jersey department of education for March, the duties of members of boards of education are discussed by Herbert N. Morse, the business manager of the department, as follows:

The community has to a large extent entrusted to you as a member of the board of education, the care of its children. You have assumed this obligation voluntarily and have taken a solemn oath to fulfill the duties of your office. The state has delegated to you the authority to carry out the purposes for which you have been elected.

Therefore, it will be necessary for you to believe in the education and training of the children of school age through good schools. You should believe that your position is one demanding thoughtful, broad-minded and unselfish

service. It will be necessary for you to know what the present school conditions are and what they should be in order to be better able to meet your responsibilities.

Your obligation is to determine policies; select teachers, a clerk or secretary, an attendance officer and medical inspector, and hold them responsible for efficient work; approve new undertakings; see that sufficient money to maintain good schools is procured; and determine all expenditures. You must realize that the teacher is the most important factor in any school. Therefore, it is your duty to see that nothing but the best teachers are selected for your schools.

You are obligated to the children in your community to give them the best that the district can afford. Therefore, it is your duty to

ask the superintendent, the supervising principal or the county superintendent to recommend teachers to fill vacancies. Your educational expert should have a better knowledge of the means of finding good teachers than you have. He should be a better judge of good teachers than you are. You should delegate this responsibility to him and hold him responsible for the results obtained. This will relieve you from the responsibility of selecting teachers and also secure for your schools better teachers.

In the appointment of teachers upon the recommendation of your educational expert, you should not allow personal bias to influence you. Do not permit yourself to be biased politically, religiously or socially. There should be no favoritism in the appointment of teachers. Schools do not exist to furnish employment for any one. Schools exist for the children alone.

It is your duty to give to your community better schools for their taxes. Do not give your community lower taxes at the risk of providing poorer schools. Be liberal but not extravagant in your financial school policy. Don't be penny-wise and pound-foolish.

People want good schools and are ready and willing to pay for them if they are properly carried on. You must see that the community gets good schools and show the people that they are getting good schools. The only way to get increased funds from the community is to show them that they are getting their money's worth. An increasing number of people feel that a good school is a great asset to a community. It pays large dividends, by producing better citizens for tomorrow. It increases the desirability of a section as a place to make a home. This has a monetary value.

It will be necessary for you at times to listen to suggestions from residents of your district as to policy or procedure. While listening to suggestions, you must remember that the duty and responsibility of running the schools rests with the board and not with individual residents.

You must see that every teacher has the things she needs at the school before it opens. The children and teachers can not work effectively and successfully unless they have the necessary tools. It will cost no more to have the necessities for school work on hand and ready for the first day than later. Textbooks and maps should be good, clean and not dilapidated. It is your duty to use your influence to keep them in this condition. If textbooks are

poor, dirty, and dilapidated the children will be seriously hindered in their progress in their various subjects.

You must use your influence to see that all school buildings, inside and out, are kept in good order. It is economy to keep them so. Also that there are proper and well kept playgrounds around each school building.

The law states that "the board of education shall have outhouses and water-closets kept in a clean and wholesome condition." Use your influence as a member of the board to have the outhouses and water-closets frequently inspected to see if they are clean, in good order and not defaced by improper marking.

You must attend the meetings of the board of education regularly. You are the representative of the public and in order to carry out their will effectively it is necessary for you to attend all meetings of the board. When requested to serve on a committee, do so willingly and endeavor to do your share with dispatch.

You must use your influence to have the district clerk keep the records of all meetings faithfully and accurately, that all communications are answered promptly, and that he should present to the board all communications addressed to the board. You should demand a financial report from both the clerk and custodian at each regular meeting. You must require the medical inspector and attendance officer to report concerning their work at each regular meeting of the board.

You must see to it that your educational expert (superintendent, supervising principal, or county superintendent) reports to your board concerning the efficiency of your teaching staff and other employees coming under their supervision.

As a member of the board it is impossible to please everybody. Many times decisions must be made which are likely to be unpopular with some individuals. If a decision is for the good of the child you must show your courage in supporting it. Do not permit every new fad or policy to get in your schools until you have given it careful thought and complete analysis.

Do not overlook the legal fact that you and the other members of your board must be the leaders in educational thought and practice in your school district and that it is your job to see that your children have the proper opportunity to get the kind of an education the New Jersey Constitution and laws guarantee.

ties. Enrollment and average daily attendance are better measures, for each in a greater or less degree, determines the number of children for whom the community must provide educational facilities. Neither of these, however, measure adequately the quantity and in a sense the quality of the offering. For example, two communities having the same number of pupils may give widely different offerings. One may have an extensive program while the other only a narrow academic program.

Since about 75 per cent of the cost of school maintenance is for teachers' salaries, the number of teachers is the most accurate measure of costs now available. Just how many teachers a community of a given size should have cannot be arbitrarily determined. Further researches in the field of educational psychology may increase or decrease the number, but in the meantime state funds must be apportioned. Four standards are now available for measuring the number of teachers, (1) the census teacher, (2) the legal teacher, (3) the average daily attendance teacher, and (4) the typical teacher.

In determining the number of census teachers, an arbitrary number of census children per teacher is used and is as inaccurate as the census upon which it is based, to say nothing of the arbitrary figure used in its computation. The legal or actual teacher is a measure of the community's interest in the scope and variety of the educational offering, while the average daily attendance teacher seems to be a reliable basis for determining the number of teachers if the standard size room is not arbitrarily fixed. The "typical teacher" method is a device for using the average daily attendance without arbitrarily fixing the size of the room, and as such represents the offering for which each community should be held responsible. It represents the number of teachers that is typical for communities of a given size to employ.

Paul R. Mort has devised a technique in which he uses the equation of a straight line to measure the typical number of teachers in communities of various sizes. For making allowances for unusual costs such as transportation of pupils and such other items that may from time to time be admitted in a program of equalization of educational opportunity, he computes the typical number of teachers for each dollar expended for such items. This technique is not new as it has been in use for some time in the prediction of population growth and business activities. In the final program of equalization of school support, inquiry must be made into the source of funds and the share which the state should contribute. This share will not be on an equality or parity basis for all, but in proportion to the local wealth per unit of need or "typical teacher."

It should be borne in mind that in this study no attempt has been made to actually apportion funds or even suggest a formula for their apportionment, but merely to arrive at a satisfactory unit upon which such a formula can be constructed.

An Old Method for the Apportionment of School Funds Applied in a New Way in Minnesota

C. E. Boyer, Rockford, Minn.

Much has been written during the past decade on the subject of the apportionment of school funds with a view to the equalization of educational opportunity and school support. As early as 1905 Cubberley pointed out that the plans in three-fourths of the states were in need of revision if educational opportunity and school support were to be equalized. Since then a few states have introduced important and far-reaching changes, but in the main the situation has not changed materially during the past two decades. Now as then the principal bases for the apportionment of school funds are (1) the district, (2) the child in terms of school census, enrollment, or average daily attendance, (3) the number of teachers, and (4) a combination of these.

Whatever may be the differences of opinion as to the merits of each or all of these bases, one proposition is self-evident: The unit cost of education is not the same for all communities. The best measure of the educational need of a community is a standard that best measures the cost element. That the district is not

a measure of cost needs no amplification when one considers the extreme variation in size from village to city. Of the pupil measures, the school census is the least reliable due to the fact that it includes those in attendance at private and parochial schools for whom the community does not officially provide school facilities.

TABLE I. Standards for Estimating the Number of Typical Teachers

	Elementary Schools				High Schools ¹			
	Ungraded ³	Semi-Graded	Graded		Average Daily Attendance			
			Average Daily Attendance					
		35 and above	50-89	90-151	152 and above	10-62	63-230	231 and above
b-value	.0299	0	.0311	.0388	.0380	.0630	.0545	.00052
a-value	.96	4	1.15	0	1.58	0	2.00	0

¹If a total figure for number of "typical teachers" is desired, multiply all high school figures by 1.83 before adding to the elementary figures and transportation. The figure 1.83 represents the average ratio of the high school costs per pupil to the elementary costs per pupil. If such a total figure is desirable, the mathematics may be shortened by multiplying the a and b-values (high school) by 1.83, before computing the number of "typical teachers."

²To compute the number of typical teachers for transportation multiply the amount in dollars expended for transportation by the b-value.

³Constants have been computed for each county to measure the number of typical rural teachers, but space does not permit publication. A somewhat shorter method is to treat all rural schools below 17.5 in average daily attendance as entitled to one typical teacher and for schools between 17.5 and 35 use .0571 as a b-value and 0 as an a-value. This formula will grant the schools between 17.5 and 35 the same per pupil rate as the semi-graded formula grants at 35.

TABLE II. Stair Step Typical Teacher Standards for Each Class of Schools

	Graded Schools ¹			High Schools ²			Semi-Graded Schools		
Range of average daily attendance	Below 108	109-140	141-168	Below 24	25-51	52-71	22-51	52-85	86-119
Number of teachers	4	5	6	2	3	4	2	3	4

¹In estimating the number of graded elementary teachers beyond 6, count 1 teacher for every 26 pupils in average daily attendance. In the 4 teacher group only the upper limit was calculated since the lower limit depends upon the compliance of the district with certain standards set by the state department of education.

²In estimating the number of high school teachers beyond 4, count 1 teacher for every 15 pupils in average daily attendance. Beyond the point 262, one teacher for every 31 pupils in average daily attendance. If a total figure is desired for all classes of schools combined multiply the number of high school teachers by 1.83 before adding.

Three equations were found necessary for the graded schools, three for the high schools and high school departments, one for the semi-graded schools, and one for the ungraded rural schools. Each equation has an a-value and a b-value. To determine the number of "typical teachers," it is only necessary to multiply the

to the grade values so that in any apportionment plan adopted, a separate account of elementary and high school need not be kept.

Table I is a summary of the standards developed for estimating the typical number of teachers.

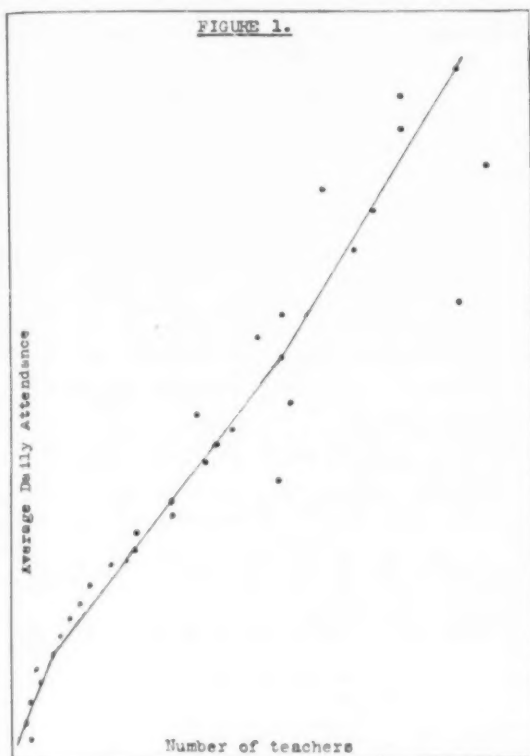
Should it be deemed desirable to fix the number of teachers for schools of various sizes without arbitrarily fixing the limits, the standards developed lend themselves readily to the necessary mathematical treatment for this purpose. Table II is a summary of this computation.

The typical teacher method lays claim to superiority over any of the other methods surveyed in the following points:

1. It can be used as a base for all proposed methods of equalization of school support.
2. It can be used as a base for comparing expenditures with the following advantages: (1) It is a better measure of the cost faced by a community; (2) the offering in small districts can be compared with that in large districts; (3) the rural offering may be compared with urban offering; (4) the offering in high schools may be compared with elementary offering.
3. It has possibilities in estimating the increased cost of increased attendance. For example a high school increases from 20 to 60. Computing the typical number of teachers for a high school of 20 and of 60 by Table I, we find 2.34 and 4.16 teachers, respectively. Thus an increase of two hundred per cent in attendance results in less than one hundred per cent increase in cost.

To those interested in the technique of arriving at the standards developed, the writer suggests a critical study of Paul R. Mort's, *The Measurement of Educational Need*, (Teachers College, N. Y.).

Fig. 1 shows the closeness of fit of equations of straight lines to the smoothed average number of high school teachers in schools of various sizes. The dots represent the actual averages of groups of schools falling within the interval used, and the straight lines the standards of Table I used to estimate the number of typical high school teachers.



RELATION OF NUMBER OF TEACHERS TO PUPILS IN ATTENDANCE IN SMALL HIGH SCHOOLS.

average daily attendance by the b-value and add the a-value. Since the cost of maintaining a high school is greater per pupil than for an elementary school, the average of the ratios of the high school costs per pupil to the elementary costs per pupil in 410 high schools and high school department systems was computed. This average figure was used to make the a and b-values of the high school equations comparable

Exploitation of Our Schools

Supt. J. R. Shannon, Danville, Ind.

A few days ago an irritated teacher rushed into the office, and thrusting a little slip of paper under the principal's nose, asked whether any person had been given authority to distribute such slips through the school. The teacher, knowing that the school did not permit such practices, had concluded that an impostor was at work with an advertising scheme. The news riled the principal equally as much as it had the teacher. Whereupon he left the office and at once found a strange man giving a large handful of the slips to another teacher and instructing her to accommodate the pupils of her room by passing the same on to them. The principal invited the man to leave the building and proceeded with his work, thinking that the affair was all over. But the incident had occurred just before recess, and later events showed that the sojourner was not to be so easily ejected. When the children came in from their play the principal learned that the clever

salesman had concealed himself behind a tree and throughout the intermission had distributed his papers directly to the children.

The slips of paper bore a statement that five-dollar gold fountain pens could be purchased for 39 cents if the pupils would present the slip at a certain store before six o'clock that evening. The pens were guaranteed to be genuine, but the slip bore the name of no dealer, manufacturer, or representative as guarantor.

In itself, this little episode is just another thing that helps to make life interesting for a school principal. But it is suggestive of a wide range of unwholesome activity going on constantly. Numerous individuals and concerns seek to find an easy market for their products by exploiting the children or teachers of the schools. An occasional business organization may be seeking to play this game, but for the most part the salesmen are free lances. Their enterprises are legitimate and illegitimate. So

are their procedures. Some have the courtesy to seek the consent of the superintendent, or principal, before entering a school building; some do not. Their objectives are to get teachers or children to buy something for themselves, or to peddle something to their neighbors. A rough, but fairly accurate analysis, classifies their purposes under four heads: Schemes for selling to teachers; schemes for selling to pupils; schemes for making peddlers of teachers; schemes for making peddlers of pupils. This classification will be observed in the following portion of this discussion.

Schemes for Selling to Teachers

It has often been said that an honest person is the most easily buncoed. If such be the case, a legion of salesmen are quite busy paying tribute to the honesty of public school teachers. Teachers seem to be "easy picking." For a salesman to make a house-to-house canvass is not half as easy as to get a group of prospective buyers at one place. This latter factor may help to popularize the annual winter sport of exploitation.

The frequency of solicitations of teachers has led many schools, including our own, to post notices on the doors of schoolhouses notifying all solicitors that if they wish to see any of the teachers they should find the teachers at their respective homes. Such a device works, and only very seldom will an agent take the trouble to see the teachers at all, if he cannot see them at the schools. This device is justifiable for two reasons: It prevents waste of time of the teacher and pupils; it protects teachers from annoyance.

Most of the solicitors preying upon school teachers' incomes are salesmen of insurance, books, magazines and correspondence courses. But there is one distinct group that sells nothing; they are beggars purely. They seem to be working on the philosophy that teachers are "easy", that they can be seen without much effort, and that as public servants their sympathies and moral obligations will lead them to be more liberal than the average citizen. School authorities are fully justified in prohibiting such exploitation of teachers. Teachers should be treated the same as other citizens in the matter of solicitations for any purpose whatsoever. It is the duty, even, of school boards and superintendents to guarantee to teachers such consideration.

Schemes for Selling to Pupils

During the World War the custom of soliciting school children for various patriotic and civic enterprises became prevalent. Now that the war is over and some agencies have persisted in continuing war-time tactics, the whole practice has fallen into disfavor. Consequently, numerous school boards have passed resolutions forbidding money-raising campaigns among school children. Such action by boards of education is commendable. But, in many places, there is yet another step to be taken: Salesmen who seek to purloin the kiddies' pennies should be debarred also.

The man selling 39-cent gold fountain pens is typical of this class of exploiters. Others, too commonly known to mention, belong to the same crowd. In all cases, they are trying to take advantage of a situation. They know that it is easy to play upon the credulity of a child, and they recognize that the public schools have assembled large numbers of children in such a manner that they can approach them easily. Under such conditions, any smooth talker can make a big "clean up" if permitted to do so. The point is that they should not be permitted.

Making Peddlers of Pupils and Teachers

A slightly different brand of exploitation is found in the common device of some agencies to depend on the schools for their salesmen. For example, some one may have mottoes for sale.

(Concluded on Page 158)

School Department Show Window

Supt. R. C. Clark, Seymour, Conn.

The particular window here described is not a window. It is not wholly for show. It is a device for self-information, inspiration, and presentation of several features about the school system.

While visiting our local manufacturing plants, I have been interested in the pictures of the different features of the business displayed graphically in the offices. Following their example I have, as a matter of interest, hung in my office a framed photograph of each school building under my supervision. It is an inspiration to have them there. It brings effectively to my mind the fact that in these buildings there are 1,600 pupils, whose present and future welfare depend to some extent at least, on my devotion and intelligence in the performance of my duty.

Here is the high school building, which was won and erected after a long and apparently hopeless education of public opinion. It tells me that patient, constant education wins the day. There is old Center, a monument to those men of the past who sought to provide for the education of the children of their own and future generations. They did their work well. With a few changes this building could be made much more suitable for its purpose. Shall I advocate these changes now or when? Castle Rock is there. Probably it should be abandoned. If not, much repairing and many changes should be made. Which should it be, and when is the best time to do it? The addition to Maple Street School is shown in architect's drawings and is a means of interesting visitors in at least one school project.

So I might go the rounds, but enough of that. I have thought that I should add pictures of various school departments, historical of the expanding of our school activities, but this show window is a slow-going thing and is built up at spare moments from time to time. Parenthetically, I might say that from year to year pictures are taken of the graduating class, the orchestra, the athletic teams, and other organizations and hung in the corridors of the building. Visiting citizens are invariably interested to find their own pictures or those of old-time friends.

The Main Feature

The main feature of this show window is a bulletin board. This is simply burlap over a

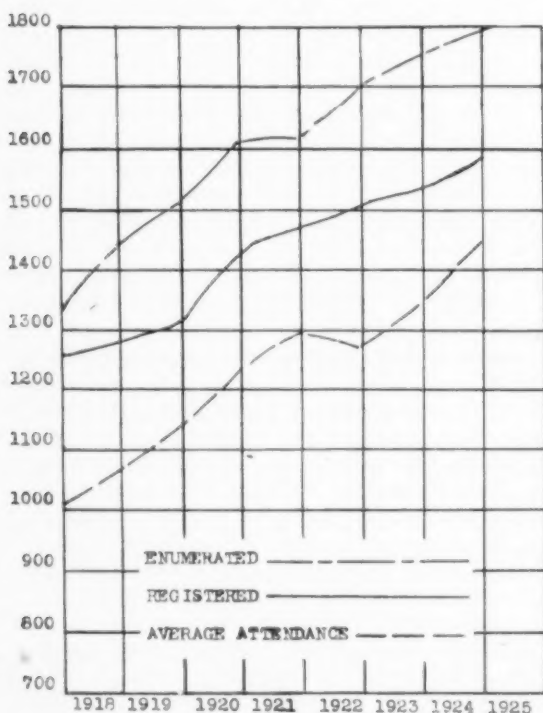


FIGURE 1.

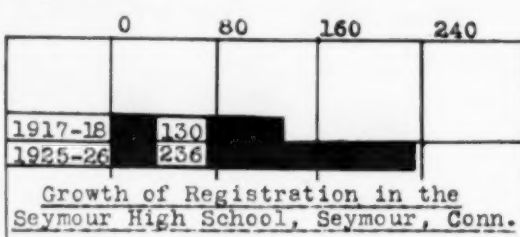


FIGURE 2.

beaver board background. It is about three feet wide and runs around the room. Here are posted some things that might be useful and interesting in bringing out facts about the schools. First is the school calendar for the current year with dates of the opening and closing of each term, dates of holidays and teachers' meetings, and dates on which work sheets and other reports are due. Then comes a list of the personnel of the system, beginning with the board of education and its sub-committees, and including the superintendent, clerk, supervisors, principals, teachers, and janitors. This list is made to do double duty, as opposite each teacher's name is the number of pupils in that teacher's room. A study of this shows that the teaching load is fairly distributed, no grade teacher having less than 30 and none higher than 42 pupils. Possibly the

FIG. 3. PUPILS PER TEACHER

The average registration in grade schools, not including rural, of the 26 towns was 1822. The smallest was 462. The largest was 3968.

The number of pupils per teacher ranged from 27 to 46. Disregarding fractions the proportion of pupils per teacher is shown by the following table. The position of Seymour is indicated by an asterisk.

Pupils per teacher	27	28	30	32	33	34	35	37	38	39	40	41	42	45	46
Number of towns	1	1	1	1	1	4	4*	3	2	2	1	2	1	1	1=26

The median number was 35 plus.

FIG. 4. THE NUMBER OF PUPILS PER TEACHER IN THE HIGH SCHOOLS OF 25 TOWNS WAS FOUND TO BE:

Pupils per teacher	18	19	20	21	22	23	24	25	26	27
Number of towns	2	2	2	1	4	2*	5	4	2	1

The median number was 23.

FIG. 5. THE NUMBER OF CLASSES TAUGHT BY THE HIGH SCHOOL PRINCIPALS IN 25 TOWNS WAS FOUND TO BE:

Number of pupils	0-99	100-199	200-299	300-399	400-499	500-599	600-699	Total
Principal teachers:								
No Class	0	0	0	1	3	1	2	7
1 Class	1	1	3	1	0	0	1	7
2 Classes	0	1	4*	2	0	1	0	8
3 Classes	0	1	0	0	0	0	0	1
4 Classes	1	0	1	0	0	0	0	2
	2	3	8	4	3	2	3	25

distribution is better because this list was made. The main point is that the information is right there for all who will to read. The inquisitive taxpayer can see that the teachers are working (at least as far as number of pupils is concerned) and any teacher can see that her burden is about the same as that of the others.

Two other tables follow. One shows the growth of the schools in enumeration, registration, and average attendance at five-year intervals since 1890. Its interest is largely historical. The other shows the yearly growth of the schools during the nine years of the present superintendent's administration. This is also graphically represented (Fig. 1). The growth of the high school is graphed (Fig. 2).

A NATION'S LEISURE TIME

The test of a nation's civilization is how it utilizes its leisure time. Nations rise or fall as they participate in active outdoor and proper recreational life. People decay not from attack without but from degeneration within. Individuals do not go wrong when they work or sleep, but in their playtime. As a child plays so it becomes; as the adult recreates so he is. Recreation can become either "wreck-reation" or "re-creation." And so the challenge is to develop early in children proper play and health habits that will stay with them throughout life.

—James Edward Rogers, Chicago.

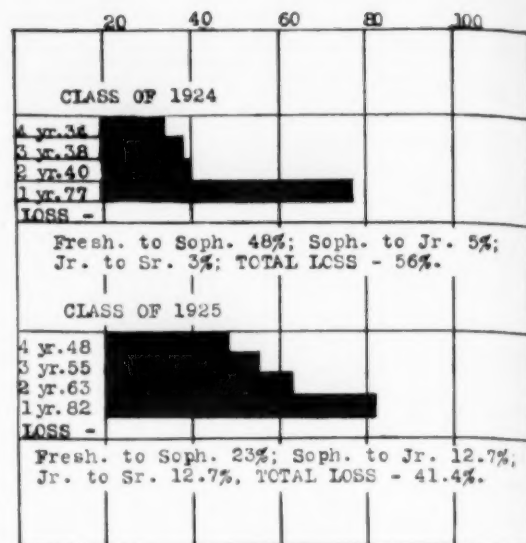


FIGURE 6.

Teachers and Costs

The question of whether we were employing more teachers than other towns in proportion to the number of pupils was raised. I investigated 26 Connecticut school systems and secured data for the tables shown in figures three and four. These tables with a star showing the position of our schools are on the bulletin board. Another table (Fig. 5) shows the number of classes taught by the high school principals in these towns. Tables compiled by the State Board of Education of the cost per pupil in all towns of

from five to ten thousand are posted. An important table gives our appropriation under each item with the amount spent to date. This table is handy for reference to the superintendent frequently and to members of the board of education occasionally.

A clipping from a publication of the National Education Association shows that not more than forty per cent of those entering high school reach the senior year. A graph of the various classes (Fig. 6) shows the percentage of our classes retained. It also shows where our loss is and is a good topic for discussion at a meeting of the high school faculty. A study to follow shortly will be the loss from grades six, seven and eight. Age-grade cards of the schools are shown. Results of various standard tests are shown by graph or table. The cost per pupil in average attendance is indicated for the past eight years. One table gives the financial standing in relation to the budget at the present time. A graph showing proportion of growth in teachers' salaries and cost of living is shown. The number of promotions and non-promotions are shown by grade and school. Projected plans are also shown.

This "show window" is a simple device. It was begun in a small way and has grown gradually to be a very helpful and inspiring thing.

The Administration of School Building Programs

School Building Program Organization and the Question of Costs of Construction

Osman R. Hull, Ph.D., Assistant Professor of Education, University of Southern California, Los Angeles

The problem of school housing is constantly before boards of education and school departments. The direct and predominating influence of adequate building facilities on the instruction program makes schoolhouse construction a matter of vital concern to the superintendent of instruction and his staff, while increasing school expenditures and building costs confront the directors and the business department with the problem of adequate financing and economical construction.

Sources of the Problems of School Building Program Administration

The rapid growth of cities, the lengthening of the period of school attendance, increasing school enrollment, the introduction of new types and divisions of school instruction, increasing expenditures for all school purposes, and increasing costs of construction are some of the influences operating to complicate the problem of school housing. These influences come from beyond the control of the schools yet are a part of the progressive development of a prosperous nation. As such they must be met by those charged with the responsibility of directing the work of public education, and adequate provisions must be made to meet the new situations that are presented. New conceptions of the responsibility of the schools have led to a new and varied demand on the school plant and those responsible for the planning and construction of the buildings that are to house the modern program.

The best available architectural service has long been considered a necessary provision in arranging for a building program, and in recent years architects and architectural departments have added the expert engineer to their staff to care for the many problems arising from the heating and ventilating, mechanical equipment, and power installations required in the modern school building. Still more recently the more progressive cities have engaged the services of the educational engineer specializing in the educational requirements of schoolhouse construction.¹ The educational requirements in school building planning have become so intricate and at the same time so extensive that we can no longer expect a man to be a specialist in this field and at the same time expect him to be an expert in planning and design. Such expert educational service is necessary for there is an intimate connection between the building plan and the educational program of the school. Cities are now realizing the importance of employing an expert in school planning who is able to interpret the school program in terms of building plans.

"Specialization within the field of architecture is producing architects who are mastering the distinctive architectural requirements of school buildings, and specialization within the field of education is producing educators who are mastering the educational requirements. The architectural and educational requirements, however, must be coordinate before a satisfactory school building can be evolved."²

The rapid increase in expenditures for the maintenance of public education and for the construction of new schools is accompanied by the desire of boards of education and their executives to economize, realizing, however, that economy does not lie in the direction of lower

total expenditures for education, but in the intelligent and economical expenditure of school funds. Economy in building expenditures can be obtained only by a careful and scientific determination of the building requirements of a city, the elimination of waste space and uneconomical use of the school plant by careful educational planning, and the assurance of durable and economical construction through competent architectural and engineering service. The demand for more and better school buildings of a more intricate type is certain to continue with the expansion and improvement of modern education, with the result that expenditures for public education will probably continue to be high.

School building program organizations established by cities. Cities have provided within their administrative departments divisions or bureaus of school housing, whose chief business is the planning, construction, maintenance and repair of school buildings. We shall, therefore, consider at this time the manner in which several cities manage their school building construction programs, in order that a clear understanding may be had of the duties and personnel of that organization of the school department which is directly responsible for the administration of the building program. One of the organizations that is typical of the provisions made by the more progressive cities that recognize the desirability of a close relationship between the instruction department and the construction of new buildings is presented in the plan used by the city of Denver, Colorado.

The Denver plan of organization. In Denver, for the purpose of securing the cooperation of the entire architectural profession, the school board assigned the different school construction jobs to different architects. Consequently in their program of 23 different jobs they have employed 22 different architectural firms. This arrangement meant, of course, that an organization would need to be built up to properly coordinate the work of so many different architects. The board of education, therefore, employed an assistant superintendent of schools with experience in directing school building construction and placed him in charge of the building program.

In this organization the architects take orders directly from this officer, who works out the educational requirements, provides sketches showing typical floor plans, and the facilities provided in typical classrooms of different kinds. All of the orders from the board of education or the superintendent of schools are transmitted to the architects through this officer. The preliminary sketches by the architects are submitted to the assistant superintendent and are carefully checked for the purpose of seeing that they are properly organized for schools, that there is no waste space, and that they conform to the standards of lighting, orientation, and the like. When he approves the sketches, they are submitted to the superintendent for his approval. When the superintendent approves them, they are submitted to the board of education for approval along with the architect's sketches of the elevation and perspective. When the board approves the sketches, the architect is authorized to proceed with working drawings.

The assistant superintendent follows the progress of the working drawings, and when the plans and specifications are finally made, checks them in detail, makes the changes which are necessary, approves them, and finally sub-

mits them to the board for approval. The detailed specifications are not gone over by the board, but an outlined form of the specifications is submitted to them.

Denver has found that when so many architects are employed, some of them do not have adequate structural engineering service. The board of education has therefore employed a firm of engineers to check and correct all structural plans and specifications for all school jobs. For this service the engineers have been paid \$750 a month, prorated against the individual jobs and paid out of the architects' fees.

The heating service is under the direct supervision of the chief engineer of the board of education, but the plans and specifications are worked out in the office of a heating and ventilating engineer employed by the board. The architects are paid six per cent commission and a portion of the fee is used in paying for the heating and ventilating service.

The supervision of construction and inspection is carried on by two agencies, first by the architect, and second by the firm of engineers. This is paid for out of the architects' fee of six per cent. The fee of six per cent does not cover the cost of the office of the assistant superintendent, which amounts to about \$10,000 a year, or less than two-tenths of one per cent of the cost of construction. The unit cost of construction in Denver is from about 26 to 38 cents per cubic foot, \$6,745 to \$14,377 per room, and \$169 to \$324 per pupil.

The Atlanta plan. In the city of Atlanta, Georgia, the board of education employs a supervising architect to supervise the actual construction of the buildings. In their recent program they also retained the services of Messrs. Strayer and Engelhardt in preparing building plans and also to make a survey. Also an expert auditor was selected to audit all bills incurred in the erection of school buildings.

The supervising architect employed by Atlanta was responsible for the checking of plans, the administrative details of construction and the supervision of construction. The actual plans were prepared by local architects, a different one being engaged for each building.

The overhead cost of construction under the above plan was six per cent, distributed as follows:

	Per Cent
1. School housing and program expert....	0.5
2. Supervising architect.....	1.0
3. Project architect.....	4.5

Unit costs of construction for Atlanta for the year 1923 were 25 to 39 cents per cubic foot, and \$6,982 to \$13,160 per room.

The Philadelphia plan of organization. In the city of Philadelphia, Pennsylvania, the school board has for some years operated a building department that has charge of all repairs and construction of buildings, with a superintendent in charge. In this department is a well trained experienced school architect and a corps of assistants. There is also a school engineer. Both of these are under the immediate direction of the superintendent of buildings.

All plans for new buildings are prepared by the architect and his staff in accordance with the requirements established by the superintendent of schools as to type of building required, size, layout of rooms, equipment, and other items for the proper administration of the building. Before any plans can be either approved by the committee on property of the board, or executed by the department of build-

¹Chicago, Denver, Pasadena, Washington, D. C., Baltimore, Atlanta, San Antonio, Detroit, Philadelphia, St. Louis, and others.

²Kingsley, Clarence D., "Dependence of School Architecture on Educational Engineering," *American School Board Journal*, Jan., 1925.

ings, the superintendent of schools must sign them. He can go over the plans carefully with the architect and with such department heads as he desires to consult before signing the plans. At the present time an assistant superintendent of schools is employed to make preliminary studies of the educational requirements for new buildings and to assist the superintendent in checking and approving plans and specifications submitted for his approval. Philadelphia reports an overhead cost of construction of one and nine-tenths per cent.

The question of overhead cost. The school building administrative organizations discussed in the preceding paragraphs reveal a variation in the per cent of the total building cost paid out for plans, specifications, supervision of construction, and the like. This overhead cost in the construction of buildings is seen to vary from six per cent in the case of Denver and Atlanta to one and nine-tenths per cent in Philadelphia. As the building costs in the 103 cities to be included in this study are examined, a wide variation in overhead cost will be noted, and also variations within groups of cities when classified by types of school building administration used. This study will endeavor to determine the relationship between overhead cost of construction and type of organization, to rank the types of organization according to overhead cost, and to determine the amount and significance of the difference between types in overhead cost.

The question of unit costs. Cost per cubic foot, cost per room, and cost per pupil are known to show appreciable variation between cities. Even within cities for buildings of the same class of construction, variations occur in the unit costs due to differences in the preparation of the plans and specifications. Some buildings are expensive to construct while other buildings are more economically planned. A classification of the unit cost data according to cities operating under various types of school building organization should show any differences in cost of construction that may exist between buildings erected under one type of organization and those erected under another type. One of the problems of this study will be to determine the significance of any differences that may exist between types of building administrative organization in the cost of construction per cubic foot, per room, and per pupil, and to find the correlation between unit costs of construction and overhead costs for school buildings erected under each type of organization.

The question of the educational utility values of the building product. In comparing the costs of planning and constructing school buildings, of the same general class of construction and architectural refinement, the usefulness of the building as a school plant arises as a question of interest and concern particularly to those responsible for the administration of instruction. Altogether too often in the construction of school buildings, architects are employed and contracts let on the cost-saving basis without sufficient consideration of the question of economy of operation and efficiency of instruction of the school that is to be housed in the new building.

The "Candle of Efficiency," developed by Mr. Frank Irving Cooper of Boston, has been used by some architects in an attempt to check their plans against devoting too great a per cent of floor area to those portions of the building not used in instruction activities, and to keep the per cent of usable floor area as high as possible. There is a considerable difference of opinion as to the significance of the ratings of school buildings by the "candle of efficiency," and such scores of efficiency are rarely recorded as a part of the building data. The familiar Strayer and



DR. HENRY M. MAXSON,
Superintendent of Schools,
Plainfield, N. J.

RETIREMENT OF DR. MAXSON

Dr. Henry M. Maxson, superintendent of schools of Plainfield, N. J., has announced his retirement, to take effect on September first. Dr. Maxson retires from school work after a service of 34 years. A man of scholarly attainments, high ideals, and sound judgment, he was successful in vitalizing and developing the school system, until today it stands second to none in the state. Dr. Maxson in retiring at this time is taking the rest he has so richly deserved, and the board of education took the opportunity of expressing its appreciation of his long and valued services to the city.

Dr. Maxson was born in Connecticut in 1853. After completing his common-school education, he entered Amherst College, from which he was graduated in 1877. He immediately chose teaching as his life work, and upon graduation, entered the work of supervisor at Attleboro, Mass. From there he went to Pawtucket, R. I., as superintendent of schools. After four years' service, he resigned to accept an appointment as superintendent of the Plainfield schools.

Dr. Maxson holds the record for the longest period of service of any superintendent in the state now in office. He has been active in all the school affairs of the state, and is a life member of the state teachers' association. He is a member of the New Jersey Council of Education and has been honored by having a school named after him. Dr. Maxson holds degrees given by Amherst College and Alfred University.

Engelhardt score card for school buildings has been used frequently in school building surveys, but has been applied for the most part to buildings erected prior to 1913. Only one of the cities of this study reported that school buildings erected in the last decade had been scored. H. W. Anderson, assistant superintendent of schools, and director of school housing at Denver, Colorado, is developing a service unit as a means of measuring the educational efficiency of a school building and a similar investigation is being made by the Division of Educational Research of the St. Louis school system. The problem of the utility of the school plant, however, is not within the scope of the present study.

The question of community favor and support. A well managed school building program often comes to successful completion without attracting much attention from the general public. The confidence or lack of confidence of the people of a community in the school administration will, however, become evident in the event of a campaign for increased school support or the voting of a bond issue to continue the building program, and is one measure of the success with which the building program has been administered. This study will give consideration to the judgments of those closely associated with school building and community

activities with reference to the success of different types of building organization as determined by community reaction and support, and dispatch in executing the building program, and will endeavor to make such evaluations as may be assigned to ratings of this character.

The delimitation of this study will, therefore, be an investigation of the important problems of overhead costs and unit costs of construction, with a presentation of judgments by city school superintendents, school architects and chamber of commerce executives with respect to types of organization used by the cities of the United States for the administration of school building programs.

(To be Continued)

RHODE ISLAND LEGISLATION Teachers' Pensions

The Rhode Island General Assembly has amended the teachers' pension law, first enacted in 1909, to provide minimum retirement allowances of \$500 annually, and maximum retirement allowances of \$700 annually. The Rhode Island state teachers' pension is exclusively state supported, no teacher being allowed to contribute by assessment. In its present form the pension is statewide and universal, covering all teachers in the public schools maintained by towns and cities; superintendents and supervisors in public school systems, professors and other instructors in the state colleges, all teachers employed in schools maintained in state institutions, and traveling teachers employed by the State Board of Education. To become eligible for a pension, a person must have been employed in public education as his principal occupation for 35 years, 25 of which, including the fifteen years immediately preceding retirement, shall have been in the Rhode Island public school system. The pension law also provides for retirement on mental or physical liability after 20 years of service in Rhode Island public schools. The maximum and minimum limitations apply to both long-service pensions and to disability pensions. The retirement allowance for long-service is the average contractual salary for the last five years of service; if this average falls below \$500 the pension is automatically \$500; if the average is more than \$700, the maximum pension of \$700 is paid. Disability pensions are calculated by applying to the amount of the long-service pension calculated on the average salary basis a fraction determined by the relation of total years of service to 35 years. Thus, a person who has taught 20 years may receive twenty thirty-fifths or four-sevenths of a regular pension, but not less than \$500; on 25 years of service the fraction is five-sevenths.

Attendance and Employment

Other legislation affecting schools passed at the January session, 1926, recently adjourned, increases the membership of the State Board of Education to nine members, by the election of an additional member from Providence; and revises the attendance and employment laws. The revised attendance law permits employment out of school hours, on Saturdays and during vacations at age 14 without other conditions; employment at age 15 on eight years of attendance or completion of eight grades. An adjustment provision permits waiving the literacy requirement for regular employment, if the town or city superintendent of schools is satisfied that the qualification cannot be met, or if release for employment appears to be for the best interest of the child.

School Board Membership

A special act for the city of Central Falls reduces the school committee from six to five members, establishes in the committee complete control of all school affairs, establishes the referendum as an adjustment for disputes between school committee and city council on school

(Concluded on Page 158)

School Administrative Projects

William E. Smythe, Superintendent Thermopolis City Schools and Hot Spring County High School, Thermopolis, Wyo.

A definite program on a project basis contributes much to the success of the administration of a school. These projects may be outlined for a year or for a longer period. The present article proposes to show the results which have been accomplished in a small system during a period of four years under the project scheme of administration. The projects may be roughly classified under the heads of administrative, equipment, buildings and grounds, and educational.

Two Administrative Projects

The establishment of an efficient accounting system for a school is a most worthy project. Schools suffer from waste in their finances due to poor systems of accounting and improper handling of the funds. The accounts are very frequently kept by some member of the board who is so engrossed in other matters that proper attention can not be given to this important phase of school administration. To remedy this situation, the boards, since the system has two boards, were asked to employ a competent person to act as a school accountant for both boards and as a secretary to the superintendent. Several names are used to designate such an official, such as business manager, executive secretary, and clerk. To centralize the work, the accountant has her office with the superintendent and all of her records are filed in his office.

When a satisfactory accountant had been secured, it was decided to introduce the Strayer-Englehardt system of accounting. This system involves a cash book and a ledger. The ledger is provided with voucher sheets and sheets for the classification and distribution of all items of expenditure. In conjunction with this system, a requisition system, made in duplicate, was introduced to prevent unauthorized purchases and to enable the accountant to keep tab on any purchase. The board authorizes a bill through a warrant under proper board officials' signatures upon which checks are issued by the county treasurer and the treasurer of the public school board. To facilitate in the payment of small bills and rush bills, the boards were asked to grant the accountant the privilege of setting aside a small contingent fund upon which checks may be drawn directly. The books are posted monthly so that the exact financial status is known. The wisdom of outlays of money beyond the amount incident to operation and maintenance can then be readily ascertained and such outlays can be kept within the limits of the budget.

Yearly printed financial reports are made and each person attending the annual school election is given one of these reports in addition to a rather liberal distribution of them. The public is consequently kept intelligently posted on the condition of the budget and on the expenditures. This project therefore involves an accountant, a system of accounting, a requisition system, a contingent fund for emergency purposes, an annual report to the public in a detailed form. This project was completed the first year.

The second administrative project undertaken was the provision of an adequate set of permanent records. No system may claim efficiency that lacks in a permanent set of records for its pupils and teachers. To such a task the administrator must set himself. This project has resulted in a dual system of permanent scholarship card and loose-leaf for each student, a permanent record card for each student showing the scores of all general intelligence and subject tests, a continuous census record card for each student, and permanent record cards



classified by years for each teacher. These cards show the training, experience in local and other schools, and other items of importance. In addition, a complete file is made of the programs of all student plays, concerts, commencements, and a brief history of the public and high school. A permanent record is also made of all athletic activities.

Installing Equipment for Service

Equipment is a necessary tool of education and school systems. The administrator must therefore face the task of providing a sufficient amount to do the principal work of the school successfully and efficiently. Such a task may be set as one project in the administration of a school. Few systems are adequately equipped for the work which they have to do. The poorest equipped departments may be singled out for early and special consideration and later the other departments may take their turn. The administrative offices in the system were so meagerly equipped that they were given first consideration. The office of the superintendent has been provided with suitable files, an adding machine, a mimeograph, a typewriter, rugs, bookcases, window drapes, and suitable pictures; the offices of the principals and supervisors with files, typewriters, and a mimeograph. The visitor gets a good impression of the school as a business institution when he calls at such well equipped and attractive administration offices.

The manual training department which was inadequately equipped then received consideration. It is now the proud possessor of a lathe, a combination saw and jointer, a band saw, a tool sharpener, an electric glue pot, a finishing room, and sufficient tools and benches to accommodate the enrollment due to the popularity and efficiency of the department. It is also supplied with excellent cabinets for storing the tools.

The home economics department receives state and federal aid and the money has been used for equipment. It has china, silver, glassware, and linen enough to serve 48 persons, gas and electric stoves, storage cabinets, and equipment for the desks and two new sewing machines have also been added.

The commercial department has had two rows of new bookkeeping desks installed, new typewriters, a filing case and new and appropriate pictures add to its attractiveness.

True culture, if it means anything at all, means the making of the mind and personality more adaptable, and therefore more useful.

—Gilbert Parker.

The English room has been provided with new tablet arm desks and suitable and appropriate pictures. The gymnasium has also been equipped with bleachers and storage cabinets for athletic material for both boys and girls.

The auditorium had no stage scenery. Stage scenery, footlights, and overhead lights have been installed, and cabinets built to store material.

New desks have been placed in the junior high school assembly room and in one of the recitation rooms of the public school. The kindergarten has had new material added and storage cabinets. New maps, both political and physical, new supplementary readers and a visual education set have been added.

Sufficient apparatus has been added to the physics department to work the experiments and cabinets have been built for storing this apparatus.

Library shelves have been installed, the books catalogued. These equipment projects have all been rather evenly distributed over the period covered by this report. Only the important projects have been listed.

Buildings and Grounds

Two rooms have been added to the school buildings. The principal's office at the public school has been remodeled. The high school lawn has been graded, seeded, and a sprinkling system installed. The playground has been practically doubled by filling in a large hole. Playground apparatus has been added. Curbs and concrete walks have been built at the elementary and high schools. The street on the north side of the school buildings has been paved and three pieces of property adjoining the schools have been bought and paid for. No special bonds were issued for these improvements since they were met through the regular budget.

Educational

All the other projects listed exist for the sake of education and primarily to make instruction more efficient. All of these projects have been completed to create a richer environment for the students. The last project has had to do with a better type of organization, curricula, and the widening of the school program. A departmentalization of grades seven and eight has occurred. There are special teachers for these grades for all subjects. Two supervisors have been added, namely, a supervisor of music and one for penmanship and art. In addition, a director of tests and measurements has been secured. Students are classified on the basis of tests, oral and written examinations and teacher judgment. A complete file of these tests is made.

The extra-curricular lines include plays, concerts, glee clubs, oratory and debating, and public speaking. A high school annual and a school paper have also given excellent training to our students.

Two things have contributed to the success of this program. A centralized control of the finances and a project scheme of administration in which definite objectives have been set. There has not been any increase in taxation nor has the expenditure of public money been any larger than in previous years since a large amount of the equipment has been purchased through the proceeds derived from school entertainments. The experiment represents an endeavor in one of the most pioneer sections of this country and it is related for no other purpose than to stimulate the efforts of an administrator in a comparatively small system who may be laboring under the usual handicaps.

Modern Tendencies in School Administration¹

William George Bruce

I have attended state school board conventions for the past thirty years and am prepared to say that this is the largest convention of the kind I have ever attended. Organizations, such as yours, have a distinctive mission to perform and in performing the same may render a great service to the cause of education.

It has been my duty for many years to sit, as it were, in a watch tower and observe the school administrative doings of a whole country. From these observations I shall lift out something about the general tendencies and trends and discuss these with you as briefly as I may. This means, too, that I shall bring to you the national rather than local point of view.

There are at present two conflicting tendencies in school administration. The one deals with the expansion of the school service and the other with the problem of retrenchment in school costs. The nation's expenditures for school purposes reached the sum of \$1,820,000,000 last year, the highest in its history. The burden is keenly felt in many sections and the public mind is set in the direction of economy. Here in Minnesota the school bond issue sales in 1924 were \$4,450,000, and in 1925 they were \$2,931,000. The reduction here noted means that the schoolhouse shortage was relieved but it also means that a period of economy had arrived.

The Reason for Increased Costs

There are several contributing causes which have led to the increased cost of the schools. Of these there are, however, two which have led to the mounting of these costs more than any other; one the expansion of the school service and the other the decline in the purchasing power of the dollar.

The expansion of the school service simply means that the nation is buying and paying for more education than ever before in its history. The lengthening of school terms, as reflected in the rural districts, together with the prolonging of the average school life of the pupil as exemplified in kindergarten, high school, vocational and continuation schools, indicate that the quantity of education dispensed is far greater than ever before. Compulsory attendance laws too, have tended to bring the child to school at an early age and to keep him there for a longer time. Thus, while the natural increase in school population has called for more and larger schools the fact still remains that a proportionately larger number of children of school age are being taught.

The question which may properly be raised at this point is whether the public receives what it is paying for, not only in quantity but in quality of service as well. The answer must be that the average school system of today is highly efficient and that in buying and paying for education the public receives more for its money today than ever before.

The fact, however, that education costs more money, as does every other service, has led the taxpayer to become restive, and the school authorities to turn their attention to the matter of economy. Thus, the cry of retrenchment has been heard in many sections of the country. But, the best students of the subject have been unable to suggest any radical cuts in school budgets without impairing the service.

Owing to the decline of the purchasing power of the dollar a higher salary must be paid the professional workers. In the field of commerce and industry it has long been determined that a proper compensation must be provided if competent service is to be obtained. This applies with equal force to the school field. A proper

salary must be paid the professional workers, and only by doing so can a high order of efficiency be successfully maintained.

Therefore, the larger item in the school budget, that of professional service, cannot be cut without impairing the progress of the school. Minor changes, such as the enlargement or rearrangement of classes, may be engaged in, but the question of professional efficiency must constantly be borne in mind.

On the whole, I venture to say that no branch of the public service is more economically conducted than that which deals with the schools, and that radical retrenchment without impairing efficiency is not within the realm of possibility.

Question of New Buildings

Now then, let us touch upon the question of new buildings. This item does not come up with frequency, but when it does come, the school administrator as a rule is alert and circumspect. Building contracts are a matter of keen competition. It is seldom that the contractor is paid too much money. It happens frequently that a contractor goes broke because he took a job at a figure that proved too low.

There are those who believe that some economies may be effected in structures that are less ornate, lighter in bearing strength, and more practical as to cubage distribution. On the first point, it should be said that if a community desires to express its civic pride in a stately high school building, and is willing and can afford to pay the price, it cannot consistently be charged that extravagance has been indulged in. That is a matter which concerns the particular community and no one outside of the same. A fine architectural structure is always an inspiration in itself and lends an additional dignity to the cause of education. When we speak of bearing strength, the arrangement of cubage, and the orientation of schoolhouse space, we must leave the problem to architects and engineers best fitted to deal with the same.

There is perhaps one item worthy of mention. During the past year it has developed that many of the cumbersome ventilating devices in schoolhouses have proven worthless. Millions of dollars have been invested in systems of ventilation which remain idle and which represent a waste investment.

Consequently, a controversy has arisen in the several schools of ventilating experts, with the prospect that the univent system and the open window will hereafter receive greater consideration. Unquestionably greater economy will in the future be effected in the field of schoolhouse ventilation.

Taxation and School Support

One of the unsolved problems in school administration relates to taxation and state support. During the past year school terms had to be shortened in the states of Ohio and Illinois, because of an insufficiency of funds. Faulty methods of taxation have been largely to blame. The question of equality in school support, namely, to obviate the inequality between the poor and the rich district, has by no means been brought to a satisfactory solution. There are still all over this broad land school districts with many children and a meager tax ability as against school districts that have ample means to provide the best in schoolhousing and teaching service. There are districts where one mill taxation will yield more ready money than will a hundred mills in other districts. To exact a state school tax on wealth and to distribute the same on the basis of school population has done much towards relieving the situation, but it has by no means made the equalization complete.

Further progress in this direction is still to be sought.

School Boards vs. City Councils

One of the most interesting phenomena of the day is found in the conflict that is now raging between the school boards and city councils in the eastern states. City councils have by law been entrusted with the approval or disapproval of the sums called for in school budgets. In many instances, however, city councils have sought to determine how these moneys shall be expended, what salaries shall be paid to the workers in the school field and what should be expended in buildings and their equipment.

Where boards of education have appealed to the courts, it has been decided that a city council may fix the total amount that shall be expended, but that it cannot determine whom the school board may employ or what compensation shall be paid to those employed.

Experience has demonstrated that where boards of education are accorded financial independence, or are free from city council domination, they have exerted greater economy than they have in instances where this independence is not granted them.

Dignity of School Board Service

Other tendencies and trends in school administration might be referred to but suffice it to say at this point that whatever they may be they are in the main in the direction of greater service within the costs now established. While it is evident that a period has been reached where further expansion in present school activities, involving increased expenditures, are being checked, it is also clear that a more intensive effort in the direction of professional service has become the order of the day.

In conclusion, it should be said that there is no prouder position in the public service than that of administrator of school affairs. To serve on a board of education means to foster the prestige, prosperity, and perpetuity of the great Republic.

THE TEACHER'S CODE OF ETHICS

The Iowa State Teachers' Association adheres to the following code of ethics:

He who teaches should have faith in his calling and should believe in boys and girls. The expression of this faith involves a fivefold ethical obligation:

I. To SELF.

1. The teacher should be neat and cleanly in person and of noble mind.
2. He should be faithful in the discharge of his duty, able, after closest examinations, to respect himself.
3. He should seek to improve himself in all qualities essential to one who is to direct and modify the lives of others.

II. To THE CHILDREN.

1. The teacher should always be courteous, kind and sympathetic.
2. He should respect personality and seek to discover and develop the abilities and capacities of each.
3. He should train for citizenship, inculcating respect for law and order, and the habit of obedience to properly constituted authority.

III. To THE COMMUNITY.

1. The teacher should demonstrate the importance and significance of education.
2. He should identify himself actively with civic and social interests.
3. He should protect the rights of children.

IV. To FELLOW WORKERS.

1. The teacher should be courteous, appreciative, friendly and frank.
2. He should stimulate scientific inquiry, and should freely share the fruits of his own investigation.
3. In seeking employment, he should be sportsmanlike and fair.

(Concluded on Page 158)

¹Abstract of an address before the Minnesota School Board Association.



EVANSTON TOWNSHIP HIGH SCHOOL, EVANSTON, ILL.

Perkins, Fellows & Hamilton, Architects, Chicago, Ill.

The Evanston, Ill., Township High School is built on a site of unprecedented size. This not only provides ample space for present and future building requirements, for tennis courts and other playground activities, for the main athletic field and practice fields for athletic teams, but an ample piece of ground still remains to be developed for garden and agricultural purposes.



LIBRARY, EVANSTON TOWNSHIP HIGH SCHOOL, EVANSTON, ILL.

Perkins, Fellows & Hamilton, Architects, Chicago, Ill.

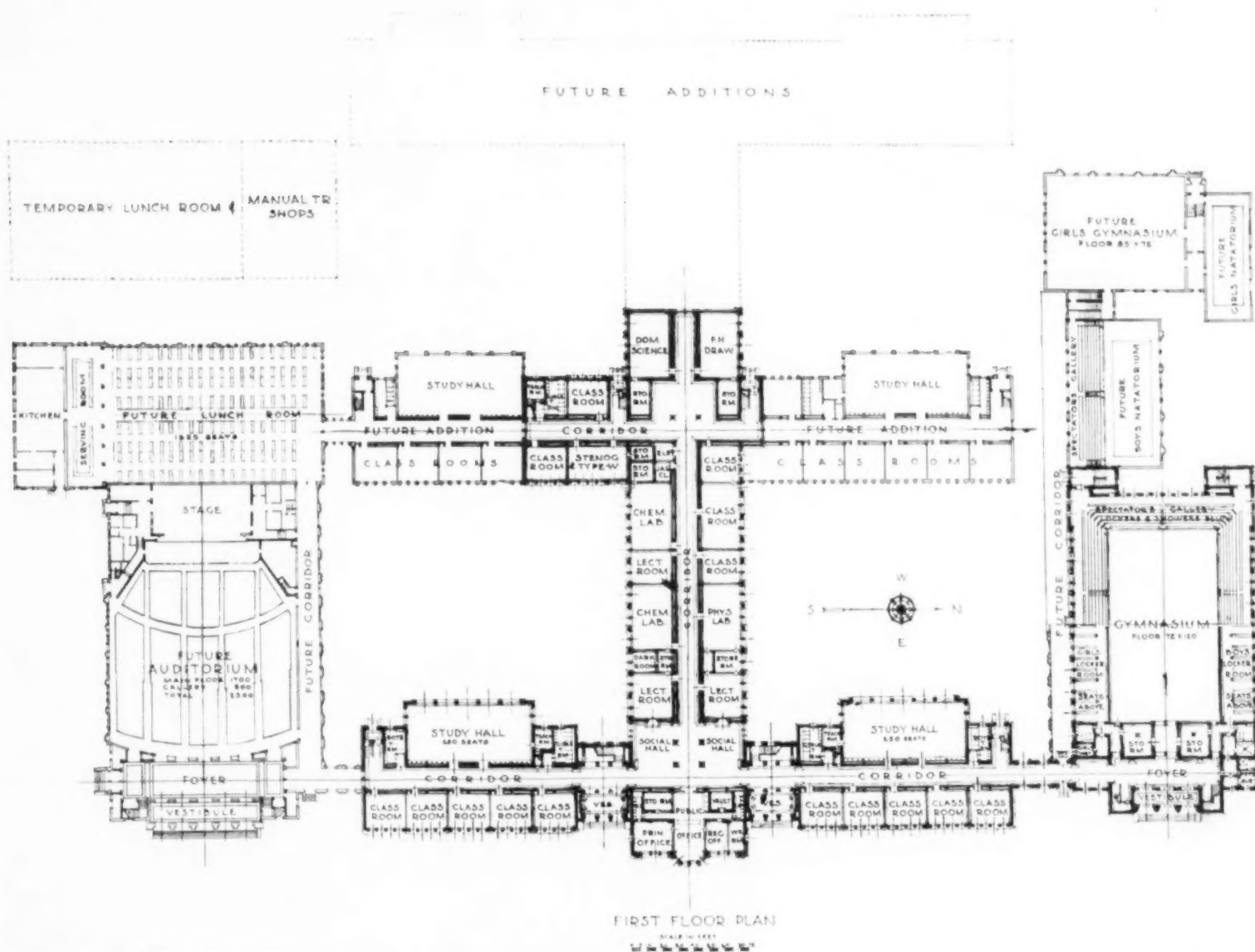
The Library at the Evanston, Ill., Township High School is a room of truly noble proportions, expressing its functions in a simple and dignified manner. Bookcase space for 15,000 volumes is provided, with adjoining rooms for the use of librarian and assistants.



GYMNASIUM AT THE EVANSTON TOWNSHIP HIGH SCHOOL, EVANSTON, ILL.

Perkins, Fellows & Hamilton, Architects, Chicago, Ill.

The Academic Building of the Evanston Township High School, designed in modern adaptation of Gothic style, presents an imposing east front with well defined exterior expression of the functions of its component parts. The Gymnasium wing is on the right, the Auditorium wing will be on the left when built.



EVANSTON TOWNSHIP HIGH SCHOOL, EVANSTON, ILL.

Perkins, Fellows & Hamilton, Architects, Chicago, Ill.

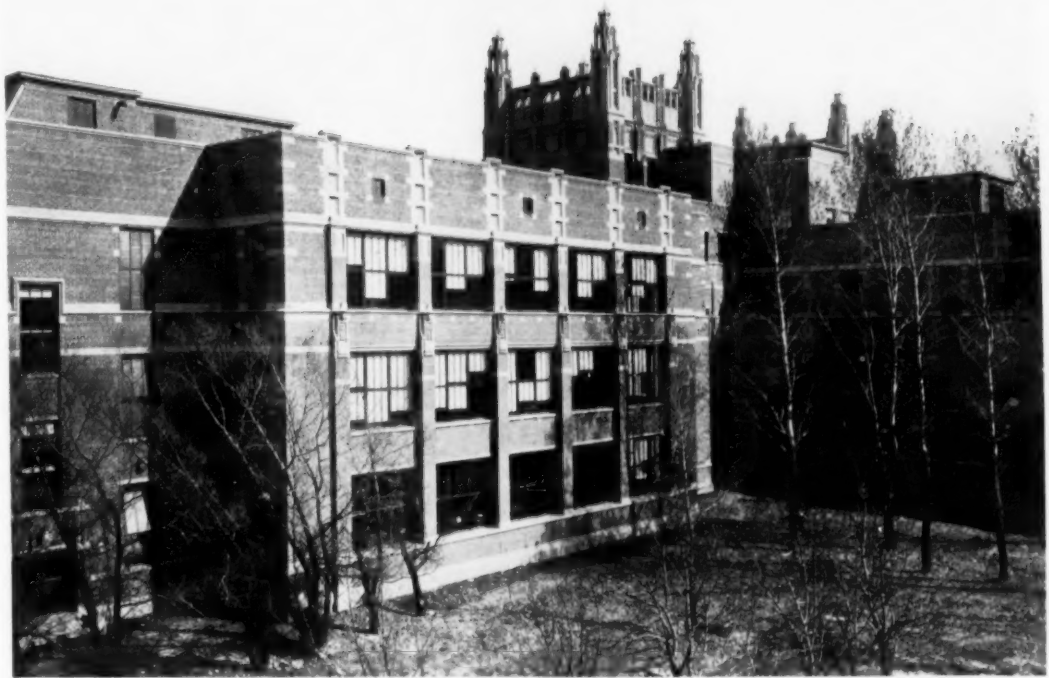
It will be seen at a glance that the Evanston, Ill., Township High School is planned not only to accommodate a large present attendance but to provide for future growth on a great scale. The buildings when completed, will cover a rectangular piece of ground approximately 800 feet long by 500 feet wide.

EVANSTON HIGH SCHOOL

The Evanston Township High School, Evanston, Ill., is one of the largest and most important of such institutions in Cook County, outside of Chicago. Although the institution is quite an old one, its largest period of growth has been in recent years. The district served by it is approximately four miles long, bordering on Lake Michigan and less than two miles in width.

Prior to the construction of the new buildings, serious consideration was given to the question of establishing two high schools in this district in the place of one. This idea however, did not prevail and a very large site of level land in the west central part of the city was purchased for the purpose of building a central high school which would meet all requirements of the district for many years to come and would be capable of expansion to an ultimate capacity of 4,000 pupils or more.

The City of Evanston has long been a community of cultivation and learning, being the seat of the Northwestern University. The tradition of the Evanston High School is that of a secondary school, primarily intended to pre-



VIEW FROM THE NORTHWEST, SHOWING THE NORTH GROUP OF STUDY HALLS.
EVANSTON TOWNSHIP HIGH SCHOOL, EVANSTON, ILL.
Perkins, Fellows & Hamilton, Architects, Chicago, Ill.

pare its pupils for college entrance. The system of administration in the Evanston High School differs in some respects from that of the more typical modern high school. A study hall accommodating 250 pupils is provided for each five classrooms and each of these groups is under the guidance of a group supervisor, whose office adjoins the study hall. There are six such study halls now in use.

The central section of the building is taken up with the rooms for the science departments with the administration suite in the front central part flanked by the two main entrances and opening on to the delightful social halls. Above the administration suite is a magnificent library which extends through two stories. The main gymnasium with its accessories, has been constructed, leaving the girls' gymnasium and natatorium for future additions.

The auditorium wing, including the permanent lunch room has not yet been built. A large temporary wood structure has been built to fulfill the Mess Hall requirement and to house the Manual Training Shops pending the construction of the permanent quarters for them.

All of the buildings are heated from an isolated boiler plant placed 800 feet away and having switch track facilities.

The portion of the main or academic section now built contains 3,403,151 cubic feet and cost exclusive of educational equipment, \$1,156,000, showing a cost per cubic foot of 33.9 cents.

The Pipe Tunnel and Power House construction cost \$127,200 and the equipment contained therein \$160,500, making a total for Power House and Equipment of \$287,700.

The temporary Mess Hall structure cost \$21,300 and its Equipment \$32,400, showing a total for this department of \$53,700.

The cost of Gymnasium and Passage connecting it with the Academic Building was \$313,300. The Gymnasium contains 921,414 cubic feet, which indicates a unit cost of 33.9 cents per cubic foot. The unit cost of both Academic and Gymnasium Sections with cost of separate heating plant apportioned to them was 37.1 cents.

The total of the above construction costs are approximately \$1,800,000 for the 1,800 pupils now enrolled, showing a unit price of \$1,000 per pupil.

THE MINERAL POINT HIGH SCHOOL

The new high school at Mineral Point, Wis., occupies a commanding location with two main elevations, one overlooking the town and the other overlooking the main state highway. It was completed early in the spring of 1925 and was occupied with the opening of the fall term in September.

The building is two and one-half stories in height but owing to the fall of the grade, is fully three stories high in the rear section overlooking the town. The building is 90 feet by 113 feet. It is built on a rock-face base of local sandstone, while from the base up, the four elevations are faced with variegated-colored brick and Bedford stone, with ornaments detailed in Gothic lines.

(Concluded on Page 161)



POWER HOUSE AT THE EVANSTON TOWNSHIP HIGH SCHOOL, EVANSTON, ILL.

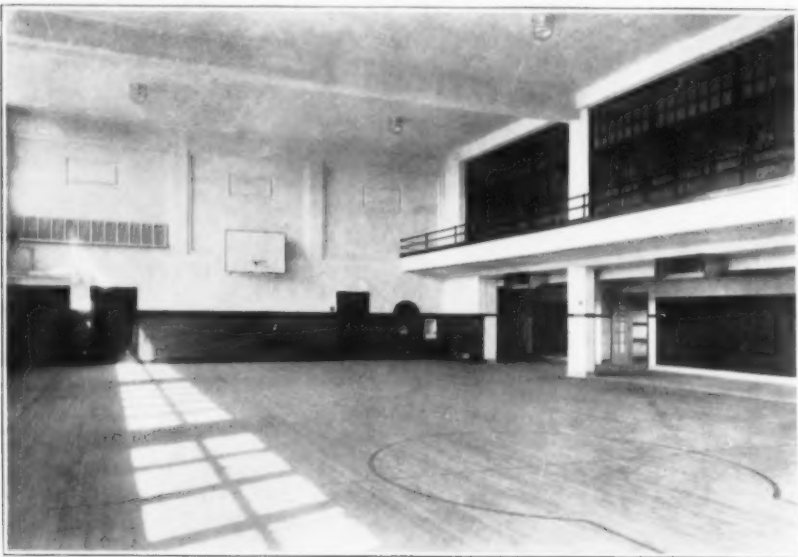


GYMNASIUM AT THE EVANSTON TOWNSHIP HIGH SCHOOL, EVANSTON, ILL.
Perkins, Fellows & Hamilton, Architects, Chicago, Ill.



MINERAL POINT HIGH SCHOOL, MINERAL POINT, WIS.

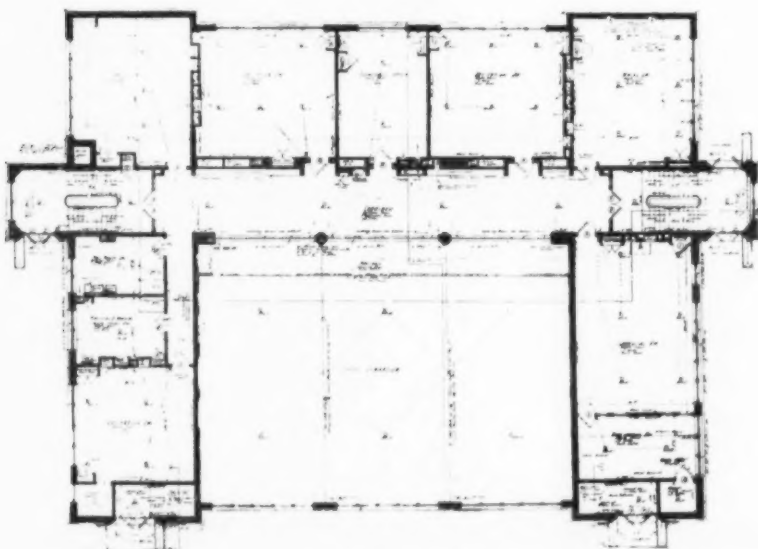
Edward Tough, Architect, Madison, Wis.



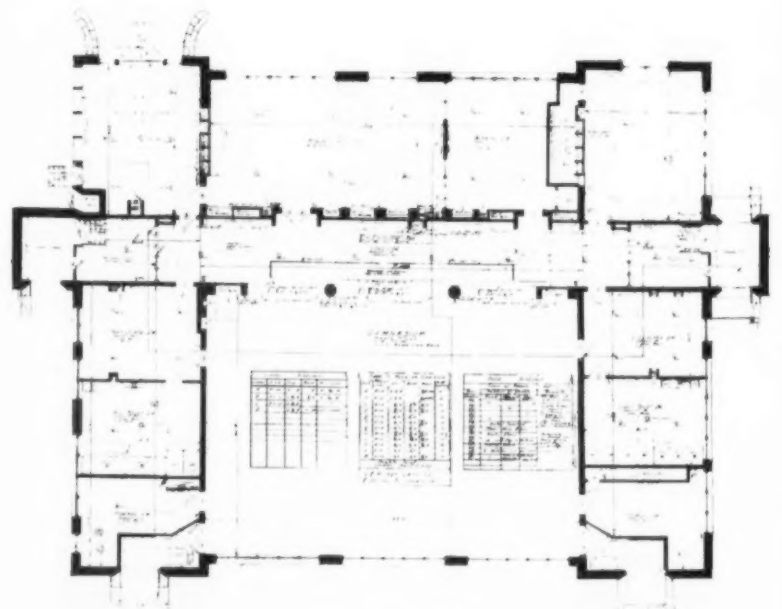
GYMNASIUM.



SECOND FLOOR PLAN.



FIRST FLOOR PLAN.



BASEMENT PLAN.

HIGH SCHOOL, MINERAL POINT, WIS. Edward Tough, Architect, Madison, Wis.



TOPANGA SCHOOL, TOPANGA, CALIF.

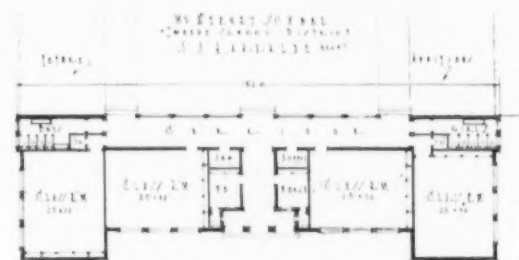
J. A. Larralde, Architect, Los Angeles, Calif.

CALIFORNIA RURAL SCHOOLS AT THEIR BEST

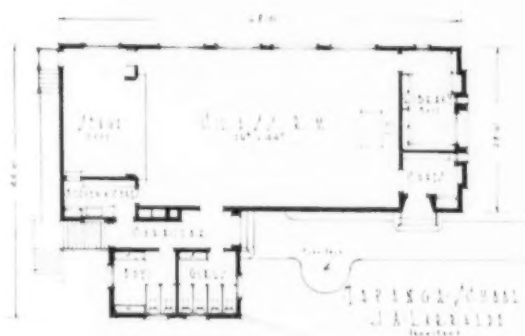
On pages 69-72 we are presenting a group of California rural school buildings which mark a new high point in the design and construction of rural schoolhouses and a new type of completeness for community and social center use of small schoolhouses. The buildings were designed by Mr. J. A. Larralde, of Los Angeles, California, and are practically all in Los Angeles County.

Topanga School

This building is picturesquely located in Topanga Canyon, 30 miles from Los Angeles. It is constructed with 8 inch hollow tile walls, stucco exterior, and a tile roof. The furnace



room in the basement is entirely built of concrete so that it is wholly fireproof. The building contains a classroom 26' 6" x 46' 6" x 13' 6" which serves also as an auditorium, a library, and a stage, a cloak room, fitted to serve as a



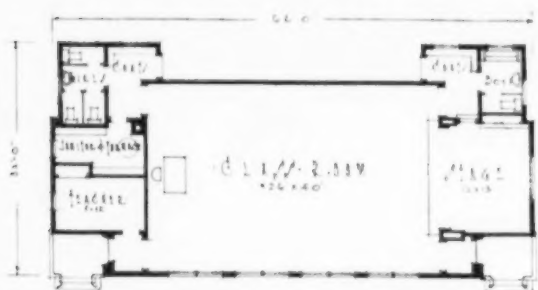
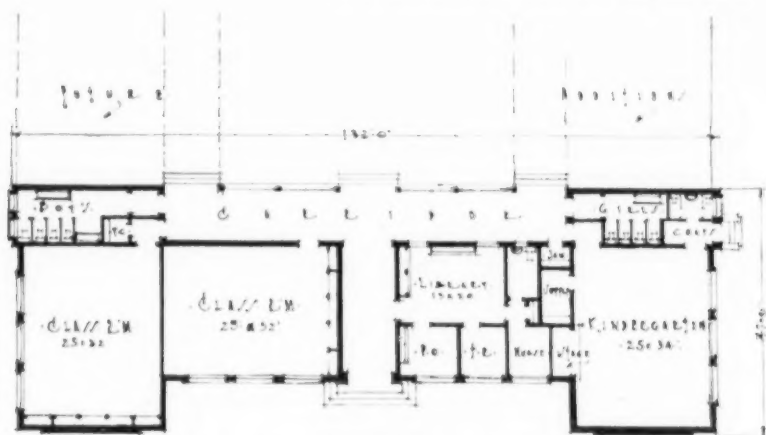
McNERNY SCHOOL, TWEEDY SCHOOL DISTRICT, LOS ANGELES COUNTY, CALIF.

J. A. Larralde, Architect, Los Angeles, Calif.



CALABASAS SCHOOL, CALABASAS, CALIF.

J. A. Larralde, Architect, Los Angeles, Calif.

CALABASAS SCHOOL, CALABASAS, CALIF.
J. A. Larralde, Architect, Los Angeles, Calif.MAYO AVENUE SCHOOL, COMPTON CITY SCHOOL DISTRICT.
J. A. Larralde, Architect.

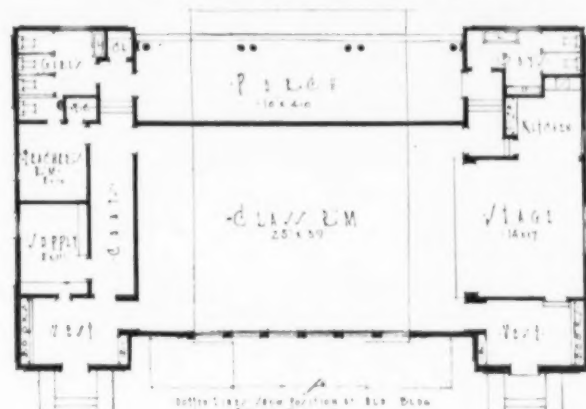
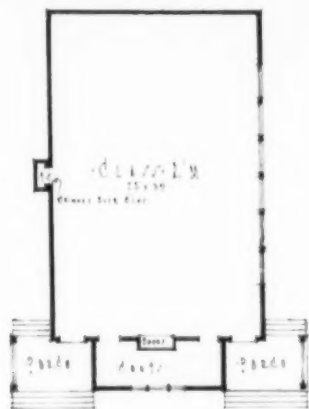
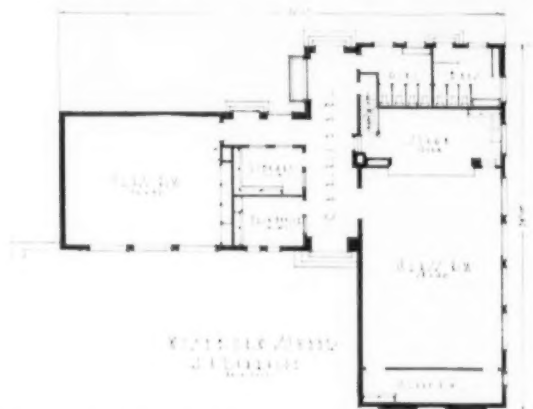
MAYO AVENUE SCHOOL, COMPTON, CALIF.

J. A. Larralde, Architect, Los Angeles, Calif.



WISEBURN SCHOOL, HAWTHORNE, CALIF.

J. A. Larralde, Architect, Los Angeles, Calif.



PLAN OF OLD BUILDING

PLAN OF BUILDING AFTER REMODELING

PORTRERO HEIGHTS SCHOOL (NEAR SAN GABRIEL, CALIF.). J. A. Larralde, Architect.

kitchen, boys' and girls' toilet rooms, and a coat room. The building is heated and ventilated with warm air. The classroom has composition blackboards and steel sash. A septic tank cares for the sewage. The cost was \$11,000.

McNerney School

This building is ten miles from Los Angeles and contains four classrooms, a principal's office, a nurses' room, and two toilet rooms. It is planned later to add an auditorium and further classrooms. The walls are of brick, the roof of tile; the classrooms are plastered and fitted with steel sash and maple floors. Each classroom measures 25' x 32' with the wardrobes. Sewage

disposal is by means of a septic tank. Heating and ventilation is by means of gas steam radiators. The total cost was \$19,000.

Calabasas School

This building contains one classroom which serves also as an auditorium. It has a stage which is used in the day for group instruction. There are two toilets and two coat rooms, a teachers' room, and a furnace room. A motion picture booth has been placed above the teachers' room. The building is constructed of

frame, with a stucco exterior, a tile roof, steel sash, and maple flooring in the classroom. It is equipped with a well and a pumping plant, a hot air furnace, and a cesspool for handling the sewage. The building cost \$8,500 and an additional sum of \$1,000 was spent for the well and pumping plant.

Mayo Avenue School

The Mayo Avenue school is located at Compton, Calif., ten miles from Los Angeles. The building contains three classrooms, a library,



PORTRERO HEIGHTS SCHOOL BEFORE ALTERATIONS

J. A. Larralde, Architect, Los Angeles, Calif.



PORTRERO HEIGHTS SCHOOL AFTER ALTERATIONS



NORWALK SCHOOL, NORWALK, CALIF.

J. A. Larralde, Architect, Los Angeles, Calif.

a principal's office, a teachers' room, a nurses' room, a small supply room, a teachers' toilet, and two pupils' toilets. The kindergarten has a small stage so that it may serve for general assembly purposes. The building is constructed of brick with a tile roof, and pine floors. The classrooms have gas steam radiators and fan ventilation. The sewage is cared for by means of cesspools. The building cost \$18,000.

Wiseburn School

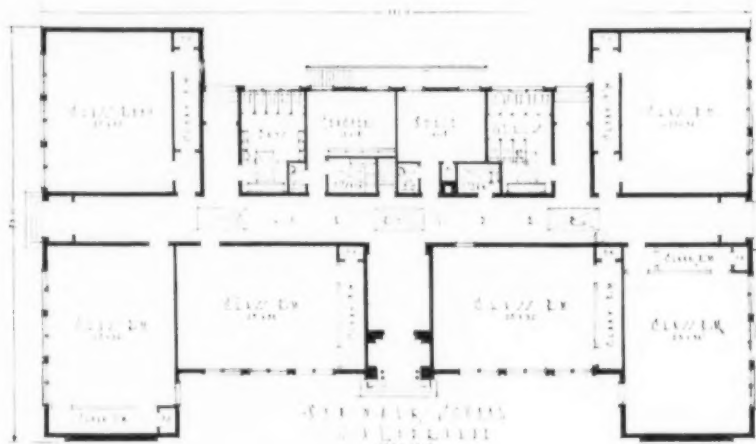
The Wiseburn school is located in Hawthorne, 15 miles from Los Angeles, and was erected at a total cost of \$18,000. It contains one classroom, 25' x 32', and one classroom 28' x 40', a teachers' room, a library, a stage, and toilet rooms. The larger classroom is intended for community use and is, for that reason, fitted with a large cloak room. The stage has a sink and arrangements for a stove so that it can be used as a kitchen when desired. The building is constructed with hollow tile walls, stucco exterior, tile roof, steel sash, pine floors, and composition blackboards. The hot air furnace is located in the basement. The sewage is cared for by means of a large cesspool.

Portrero Heights School

The Portrero Heights school (near San Gabriel) is an illustration of what may be done to convert an ordinary one-room rural school into a community center building. The building as remodeled, contains a classroom, a stage, a kitchen, toilet rooms, a teachers' room, vestibules which serve as coat rooms, and a supply room.

Norwalk School

The Norwalk school is located in the town of Norwalk, 20 miles from Los Angeles. It contains six classrooms, with cloak rooms, boys' and girls' toilets, a teachers' room and a nurses' room. It is constructed of reinforced concrete walls and a tile roof. The classrooms are plastered, have maple floors, and artificial blackboards. The rooms are heated by means of gas steam radiators. A small basement at the rear provides space for the furnace and for storage. The building was erected at a cost of \$40,000.



TRAINING OF SCHOOL PRINCIPALS

In a recent public address, Mr. Guy Phillips, superintendent of the Salisbury, N. C., schools, discussed the problem of better professional training for principals. We reproduce the following paragraphs from his paper:

"The first definition of a principal is that he must be an organizer. Big business has called for organizing ability and it has responded. No person can be a real principal who cannot so plan his work as to actually move in his organization throughout his entire plant without friction and lost motion. He must see organization problems at a glance and meet them effectively.

"In the second place the principal must be a person who has a capacity for details. By capacity is meant the ability to master details without being submerged by them. Unnumbered things must be met continually.

"Both of these qualities are needed for any administrative work. The third element is distinctly a school requirement. A principal must know education. There are today principals

and superintendents who do not realize that there is a new day in education. They still think of their work in terms of ox-cart days when we are actually living in the world of radio and flying machines. He must have a *working* knowledge of modern research methods. A few have a *reading* knowledge of these things. But few are the schools where principals are leading by making their plants great human laboratories.

"A great principal must be a student of childhood. He must study this subject in the classroom, on the playground and in the community. We hear a lot about respecting age. The principal must be a respecter of youth or he fails. No person who fails to be sympathetic, constructive, and instructive has a right to lead childhood.

"Above all else the modern principal must have that all powerful force called personality which will result in artfulness in maintaining pleasant working relations with faculty, students, and general public. Many an excellent teacher has been made into a very poor principal because of failure to realize this fact."

School Business Officials Meet in Toronto

Fifteenth Annual Convention of National Association of School Business Officials May 17-21

To say that the meeting of the National Association of School Business Officials at Toronto was exceedingly profitable may seem trite, but a convention which brings forth an enormous amount of useful facts and opinions on improved administrative procedure based on well determined principles of public policy, accounting, engineering, etc., can hardly fail to be of enormous help to those in attendance. The Toronto meeting mainly marked progress, but did not develop any new or startling ideas in school finance, building construction, or the purchase of supplies. It was noticeable that the members gave practically no attention to their own personal welfare or to their advancement in the school system, in tenure or salary, but devoted their time and attention to the practical problems of better business administration of city-school systems.

The program prepared by President E. M. Brown was comprehensive and well balanced, and brought out significant statements of policy and procedure. The Association will undoubtedly enter upon a new period of usefulness and influence as a result of the movement initiated to establish affiliated local sections or chapters. The important committees on uniform accounting and housing reported progress, which indicates that valuable studies have been begun and will receive a strong impetus during the coming year. The attendance exceeded the two hundred mark. The local hospitality set a new high mark of cordiality and generosity.

The Opening Session

The opening session was marked by two addresses of welcome quite at variance with this conventionality of conventions. The Hon. H. G. Henry, deputy minister of works for the Province of Ontario, added to his greeting a question concerning the adequate support of small school districts outside the metropolitan limits of Toronto. Hugh L. Kerr, Esq., chairman of the Toronto board of education, outlined the history of the city and described features of its public schools and separate schools. A graceful response on behalf of the Association was made by Mr. Henry B. Rose of Providence. Perhaps the habit of going through the routine of school board meetings causes the officers of the Association to take up valuable time of the first session with much routine that might be handled by the executive committee. When this routine had been dispatched, President H. M. Brown briefly reviewed the past year and urged that steps be taken to make the work of the annual conventions continuous through the functioning of committees, so that there may be more solid progress in the business control of school systems.

Efficiency in Administration

The address of Supt. Carroll R. Reed, of Bridgeport, Conn., on "Efficiency in School Administration," won the applause of the convention because of its vigorous statement of the functions of the secretary and business manager and its strong argument for greater limitation of the superintendent to the educational leadership of the schools. Said Mr. Reed:

"Inasmuch as most people feel that they know more about school buildings, janitors, the purchase of school sites and other problems of finance than they do about the quality of teaching or the objectives of the course of study, the superintendent of schools who assumes complete responsibility for all of these duties is very apt to find the non-educational phases of the problem taking more of his time than the larger and more important problems of educational policy. It is supremely important that the superintendent of schools should have time to think in order that his advice concerning school policy may be based upon sufficient consideration of all the factors entering into the problem. He should have time for professional reading, for visiting other school systems, for keeping himself informed concerning significant educational experiments. If he is to have any time at all for these matters, he must be relieved of responsibility for those problems which are related to the operation, the maintenance, and the accounting procedure so necessary in a business as large as a modern city school system."

Mr. Reed's complete paper will appear in the JOURNAL for July.

Denver is one of the large cities which has developed a plan for purchasing school sites, based upon a scientific study of its educational program and the economic ability of the district. Mr. C. M. Schenck, treasurer of the Denver board, described in detail the operation of the plan which has been used in the purchase of \$1,279,043 worth of land during eight years preceding 1926. The discussion which followed not only voiced approval of the main features of the Denver plan but brought out the desirability

of planning for five to ten years in advance, of taking into account travel distances, maximum populations of 1500-1800 children per square mile, and similar factors.

Mr. D. D. Hammelbaugh of Harrisburg, Pa., reporting for the committee on the "Handbook of Uniform Accounting" made clear that distinct progress has been made by the committees of the cooperating agencies—the U. S. Bureau of Education, the Department of Superintendence, and the National Association of School Business Officials—toward defining the exact problem. He requested that the committee be continued to develop the fiscal section of the handbook and render such other assistance as it is possible.

During the "Open Forum," Mr. H. G. Lehrbach of Pasadena, spoke for the Southern California School Business Managers' Association, which is made up of twenty or more secretaries of communities in and about Los Angeles and which holds monthly sessions for the discussion of local problems and for mutual aid in improving school business management of the co-operating members. He asked that his Association be affiliated with the national body. The request was enthusiastically acceded to in the final business session of the convention and the Southern California Association was constituted the first sectional chapter, or branch.

At the evening round table on budgets, Mr. John B. Wynkoop of Bridgeport, Conn., discussed the value of complete and frank statements of budget needs. Ask for your actual needs, said Mr. Wynkoop; lay your cards on the table and be prepared to justify all you ask for. Do not permit of unplanned innovations during the school year. Lay aside in your budget an amount equal to your insurance premiums as a reserve against fire losses. At a round table of architects and building superintendents, Mr. W. H. Gompert of New York City and Mr. W. E. Whalen of Oakland, Calif., discussed methods of handling large building operations.

Wednesday Sessions

Mr. J. M. Milligan, superintendent of school buildings, St. Louis, Mo., has made a number of valuable contributions to the work of the Association in the shape of thoughtful papers on building problems. His address on "Landscape Settings for School Buildings" brought out the aesthetic and educational values of planting shrubbery and trees, and pointed out the need for economy and balance to accommodate play activities. Play space, he said, must not be restricted and all planting must complement, soften, and unify the beauty of the building and the grounds.

While the discussion of Mr. J. D. Cassell's paper on "Controversial Ventilation" indicated some differences of opinion on the part of architects and business managers concerning the methods and standards of schoolroom ventilation, it served to indicate that the vast majority of school board officials are not in sympathy with window ventilation, but see the need of positive ventilation methods and of further experimentation. Mr. Cassell argued strongly against the position taken by Dr. C. E. A. Winslow who has recently inveighed against the wastefulness of mechanical ventilation and has urged that open windows be depended upon for fresh air in schools. Said Mr. Cassell in conclusion:

"And now it is boldly suggested that we ask the legislatures of the several states that have compulsory ventilation laws to repeal the same; and this we are asked to do, based on the determination of one set of men operating in one locality, whose honesty of purpose is not questioned. But are we going to do it with the limited knowledge at hand, or should we not rather advocate a thorough and searching investigation of a matter so important to the health, comfort, and happiness of the present and the yet unborn millions of school children?"

Mr. Geo. F. Womrath in reply to Mr. Cassell's paper, recited the experience of Minneapolis, where a two years' comparative study of window and mechanical ventilation, costing \$15,000, was dropped by the ventilating and heating engineers' association without a report.

Mr. J. O. Adams, in a report for the Committee on Uniform Accounting and Cost Finding, analyzed the accounting requirements of 32 states and showed the confusion and difficulty which results from failure to follow the federal requirements and classifications of accounts. Comparisons are at present impossible and without genuine value, because many of the states have vital defects in their plans and

blanks. Child and teacher accounting are similarly faulty and it will require long continued agitation to bring a measure of useful conformity with a minimum standard of accounting. The committee was continued with Mr. Adams as its chairman.

Wednesday Afternoon

That the small city has problems of business administration quite as vexatious and important as the large city and that these are burdensome because one man must assume all the combined duties of budgeting, purchasing, building maintenance, accounting, etc., was evident from the address of Mr. F. P. Rogers of Jamestown, N. Y., who described his methods of business control and purchasing. And that the activities of a clerk-purchasing agent may be systematized for complete control of all phases of his position, was also made clear from Mr. Rogers' very simple but complete group of forms.

Mr. Chas. L. Barr of St. Louis, followed with a paper on "School Lunchrooms in St. Louis," which provoked a lively discussion of methods and suggested the need of putting all school lunches on a self-sustaining basis so that school boards shall not be required to make any outlay for operation, maintenance, replacements, etc., after the first investment has been made. Mr. Gordon Kennedy, assistant principal of the Toronto Technical School, described the organization and educational service of the technical high schools of Toronto.

The paper on "Low Pressure Heating as Done in Minneapolis," prepared by Mr. A. L. Sanford, chief engineer of the Minneapolis schools, indicated some noteworthy economies which have resulted from the substitution of steam boilers, operated at two to five pounds pressure, for boilers operated at 60 to 75 pounds pressure. Even though it is necessary to purchase electric power for operating fans and pumps, a saving of from ten to fifty per cent has been made in numerous Minneapolis schools. In the discussion which followed, Mr. E. M. Hallett of St. Louis, showed that slightly higher pressures have proven economical in St. Louis, and urged that school engineers study local conditions to effect economy.

The city of Houston, Texas, has a most fortunate administrative situation in that its board of education can set up its annual budget without interference on the part of municipal or other local authorities. In a brief paper on "Preparing and Presenting a Budget for a City of 100,000 Population," Mr. H. L. Mills, business manager of the board of education, Houston, Tex., not only described the very favorable situation of the city, but outlined an advanced and efficient method which he employs for setting up the annual budgets. The paper will appear in a later issue of the JOURNAL.

The Annual Banquet

The Association has never enjoyed greater liberality on the part of a community than it experienced on Wednesday evening when the Toronto board of education tendered a banquet to the entire membership. After listening to the address of His Worship Thomas Foster, mayor of Toronto, the members were fully agreed on the advantages of Toronto as a place of residence and business. Prof. Norman DeWitt of Victoria College, in a most humorous discussion of the Function of Humor, administered some most wholesome sugar-coated suggestions for a continued bon entente between the United States and Canada. The function of humor, he said, is to keep men and women from going insane. If the sense of humor is preserved and applied, most individual, political, and international problems and troubles can readily be solved and settled.

The Thursday Sessions

The purchase of equipment and supplies is an ever present problem for school business managers, and local methods vary so much that there is constant need for an exchange of ideas. Mr. Samuel Gaiser of Newark, N. J., in discussing the problem of purchasing supplies and equipment and their distribution, described in detail the method which he uses to supervise and control purchases, the organization of the machinery for handling and distribution and the methods of accounting for and inventorying the vast number of articles needed by the Newark schools. He showed that while formerly a few hundred articles were purchased for school use,

(Continued on Page 161)



THE AMERICAN School Board Journal

WM. GEO. BRUCE }
WM. C. BRUCE } Editors

EDITORIAL

WHAT CONSTITUTES A REPRESENTATIVE BOARD OF EDUCATION?

This question is raised periodically. Usually some self-constituted guardian of the community pops up to discuss it. He becomes irritable and finds fault with the local board of education because perchance the personnel does not, to his notion, include the so-called "best" people. It may happen to include a grocery man, an automobile repairer, a bank clerk, and a shop foreman. Not a single man is a town leader or on a par, he holds, with the cultural standards of the modern schoolmaster!

Whatever goes wrong in the school system is traced to the persons who serve on the board of education, and the critic, bent on finding things that are off color, usually has a busy time trying to prove his case. If things are not wrong, then at least the personnel is wrong. Something must be wrong!

The fact that the grocery man, the automobile repairer, the bank clerk, and the shop foreman are really of the town's best people and fully capable to serve is not the issue. As members of the school board they have no business to sell groceries, mend bursted tires, count money, or work in a factory. That is the viewpoint of the town critic.

And yet if the board of education reflects the community's better impulse and aspiration it matters little what the several occupations of its members may be so long as these are honorable. The very fact that they do the commonplace work of the community may render them all the more valuable. They are in touch with real life and have at least the practical viewpoint. A school board made up only of highly cultured men and women could hardly be deemed a representative body. Nor would such a personnel insure the most practical administrative service.

It is commonly accepted that the board of education in order to be truly representative should include in its membership those identified with the industrial, commercial, and professional interests. Men of outstanding ability, in the banking, mercantile, and manufacturing lines, no doubt, can serve the school system to advantage, more specially when larger projects are under consideration, but it does not follow that such men are always willing to serve, or that they are indispensable to the progress of popular education.

The scope and function of the modern board of education are reasonably well defined. They call for practical judgment in matters of policies governing the school system. These policies must contemplate the educational needs of the community in the light of the community's ability to pay for them. The purely educational labors must be left to the professional factors employed to perform them.

The board of education that reflects the ideals of useful citizenship, knows the local situation and understands administrative policies that

make for an efficient school system, is reasonably representative and acceptable. The character and fitness of the individual members rather than their several vocations determine the collective efficiency of the body as a whole. The sense of proportion and the exercise of practical judgment rather than cultural attainment determines the quality and serviceability of the board of education.

WHEN SHALL A BUSINESS MANAGER BE EMPLOYED?

Several of the larger among the medium sized cities of the country have in recent months had under consideration the question of employing a business manager for the school system. In one city the advantage of employing such an officer became manifest when it was found that certain losses had been sustained because of the lack of such an officer. In another city a research expert clearly pointed out the economy involved in having a business manager.

The question of assigning a trained business man to the financial operations of a school system hinges upon the importance to which the system has grown. In the smaller units, the superintendent performs the secretarial labors, and in those of larger size, the professional and business duties fall into two parts. The superintendent looks after the professional labors while the secretary looks after the accounting and business affairs. They become coordinate officers.

The next distinction comes when it is found that the volume of financial operations is sufficiently large to require separate executive direction and control. The clerical labors may be under a competent head but aside from the routine which he directs a higher order of ability may be demanded. If economy and efficiency are to be exerted a trained business man must assume control. A mere chief clerk will no longer serve the purpose.

Thus the official who serves the medium sized and larger cities in the capacity of school board secretary is in reality a trained business man. He may not hold the title of business manager, but his function is such just the same. He knows the thousands of items that go into and about a school plant, both as to quantity and quality, and how to purchase them advantageously. He is certain to earn his salary several times over in the economies which he effects.

No well organized board of education would forego the employment of competent control over the business end of the school system any more than it would forego the employment of an educational expert in the person of a school superintendent. Both are essential to the successful operation of the school system.

The school laws of the several states in a general way favor the employment of such official service as will promote the efficient operation of the school system. At least they do not interfere with such a course. Recently the Omaha board of education was temporarily enjoined through court proceedings from creating the office of business manager. The court, however, promptly decided that the board was free to exercise its own judgment in the matter.

As stated before, where the school system is constantly growing and the volume of transactions run into high figures, the advent of the business manager is both desirable and expedient. The board of education must not only be assured that its records are correctly and honestly kept, but it must have at its command a keen business mind that not only keeps the legislative body fully informed, but that is capable also of executing its orders with dispatch and completeness.

The only question which has arisen in the past on the employment of a business manager is whether he shall be under the control of the

superintendent, or whether he shall be regarded as coordinate officer with the superintendent directly responsible to the board. School superintendents maintain that inasmuch as they are responsible for the success of a school system they must have a voice in the business affairs which so vitally affect the educational. The counter contention is that the professional man cannot be expected to have a grasp of the business side of things and that the business manager is a specialist who cannot consistently come under the control of the educational expert. But that is another question.

Just when and where such talent must enter upon the scene can only be determined in the light of local conditions. Usually the job itself is a matter of evolution. The question of definitely establishing the office of business manager arises only where the rules and regulations require such action.

On the whole, it must be left to the judgment of the board of education just when to invest the secretary with discretionary authority in matters of business, and when to designate some one else specially qualified to exert that authority. A complete control over the business affairs of the school system and the elimination of waste, are the objectives to be secured.

SCHOOL BUILDING OPERATIONS, PRESENT AND PROSPECTIVE

The school building operations for the present year throughout the United States have advanced sufficiently to permit some comment upon them. While the total bond issues of last year was the highest in the history of this country, the actual building operations for the first quarter of this year were lower than they were for the same period last year.

This can be accounted for in the fact that school authorities have delayed the awarding of contracts in the belief that building costs are coming down. There are also instances on record where the sale of bonds was delayed awaiting a better money market. On the whole, the bond sales for the first three months have been higher than they were for the same period last year.

The cost of construction is but slightly below last year. The reductions are found in the cost of building materials rather than construction labors. The latter in some centers are slightly higher over last year. Experts hold that the tendency is towards lower prices on building materials, but that organized labor costs will remain firm for some years to come. The variations from this statement are local and therefore exceptional.

When the volume of school building operations comes under consideration we strike an interesting phenomena. During the war the new construction was seriously interrupted with the result that the overcrowding of schools became acute. After the war the building operations were resumed and in 1916 something like \$125,000,000 went into new school buildings. The figure increased from year to year until in 1922 when the \$303,346,000 mark was reached. This was deemed the peak year which would not soon be duplicated. But, while the following year the figure dropped to \$272,530,000, it rose in 1924 to \$367,438,900 and in 1925 to \$423,203,700.

In making some estimate for 1926 we are largely guided by the school bond issues of last year and those engaged in early this year. Bond issues and contracts let for new construction usually run parallel with each other and if the bond issues for 1925 are any criterion for the construction operations for 1926, then it is safe to say that the total volume of new school-housing will be greater this year than last. In other words, it will exceed the \$423,203,700 figure of 1926.

There are statisticians in the building field who claim that the unrecorded school building operations carried on in rural and isolated districts constitute fully 25 per cent of the total. Our own compilations, carefully gathered each month from authentic sources, warrant us in quoting the foregoing figures. If the building statisticians are correct in their estimates, and we believe they are, then the total schoolhouse construction operations for 1926 may safely be set down at the half billion dollar mark. This would represent the largest expenditure for school buildings for any one year in the history of the nation.

TEXTBOOK AUTHORSHIP AND SCHOOL BOARD RULES

The rule whereby persons, officially connected with a school system, cannot become financially interested in business dealings carried on with that system, is an old one. It was originally framed in order to prevent board of education members from using their public office for private gain.

No doubt, the rule serves a useful purpose in that it obviates the abuses that formerly crept into school board transactions and which often resulted in much controversy and sometimes in scandal. The coal dealer on the board, the insurance agent, the real estate merchant, and the building contractor, can no longer exploit the public schools for private ends.

There are indirect business relations, however, between school board members and school employes which cannot be circumvented. The banker cannot be excluded from school board membership because perchance the school system has funds in his bank. The physician cannot be excluded because the superintendent's family employs his professional services. The lawyer cannot be excluded because he has among his clients those employed by the school system. Nor can the merchant be excluded because school people happen to patronize his store.

The ramification of business and social relations is quite extended, and if the rules were rigidly drawn in every direction all those having anything to market, be it commodities or service, would be ineligible to school board membership. The prestige and standing which a board member holds in the community may be augmented rather than marred by his official connection with the school system. It would be difficult to draw the line and say just where the interrelations shall come to a halt. To hold, however, that the person who sits officially as a member of a board of education shall not be financially interested in what is bought and paid for by the school system is sound. His voice and his vote as a school official cannot be commercialized for private gain.

So much for the board of education member. How about those who are in the employ of that board, such as superintendent, teachers, and janitors? Obviously the answer would be that they cannot consistently, aside of their regular salaries, accept profit because of their official connection. But, let us suppose that the teacher has evolved something in the way of a professional by-product, for instance, has written a textbook? Cannot the school system buy the textbook, as well as the professional service, both of which the teacher sells?

Some school board regulations say not; some state laws uphold that contention. But, is it logical to hold that if you buy the professional teaching service of the teacher you cannot buy a textbook from the same teacher? That textbook also constitutes a professional service. One is oral and the other written. The teacher is best qualified to write a textbook, hence the compensation must go to the one who earns it. To hold that a textbook written by a local

KEEP PUBLIC INFORMED

The recurrent demands upon the taxpayer for a support of the public school system entail an obligation on the part of the schools to keep the public informed as fully as possible in regard to every phase of public school activity. The schools have been taken largely on faith and we believe that the confidence has been justified, but a complete coordination between the public and its schools will come only from an enlarged understanding of the school's purposes and methods of operation. The way into greater educational opportunity can be opened only by a closer partnership between the schools and the taxpaying public.—J. J. Maddox, Supt. of Schools, St. Louis, Mo.

teacher can be sold in the neighboring town but not at home, is illogical and unsound.

The American school textbook, unquestionably the best of its kind in the world, is written by the very men and women who demonstrate its use in the American public schools. The contribution which these classroom workers are making to the cause of popular education is immeasurable. The progressive zeal which actuates them is commendable.

The manufacturer may hold that the inventions produced by his employes belong to him. But, the equities of the situation teach that the employee who has rendered service for the pay received, may own the product of his inventive genius, and dispose of the same as he pleases. The same rule applies to the instructor who has employed his genius in evolving a useful textbook. The product is his and he should have the right to market it wherever he pleases.

In Chicago and Cincinnati, and several other cities, the question has recently arisen as to whether a board of education can consistently adopt a textbook written by an author who is in its own employ. The question has been answered by many large school systems who ask no questions as to the residence of the author. If the book is acceptable it matters little, it is held, whether the author is employed locally or elsewhere. The negotiations for the publication of a manuscript are matters which are entirely between the author and the publisher. The latter markets the product wherever he can and it would seem eminently unfair to bar a book from a school system because the author happens to be employed therein.

The question as to the recognition of a textbook written by a local author is more often raised by rival publishing houses than by boards of education. Those who place a premium on true merit, are not readily stampeded by the selfish prattle of a publisher's agent. They will accept a meritorious textbook regardless of where its author happens to reside.

The accepted routine of a textbook adoption leaves the initiative to the superintendent. If he recommends a given book it is still within the province of the board of education to accept or reject. Thus, the same authority that employs classroom service may with equal propriety purchase the by-product of that service, expressed in the form of a textbook.

The ambition and zeal which prompts an instructor to breathe his best thought and experience into a serviceable book deserves encouragement, and should not be discounted because a material gain is involved. Such gains are legitimate and, considered from the standpoint of one community, are negligible. They cannot come into serious consideration when the larger educational purpose is properly weighed. Successful authorship should become a matter of local pride rather than local ostracism.

SCHOOL SUPERINTENDENTS AND THE LURE OF BUSINESS

A school superintendent of one of the leading cities of the South who has been prominent in the educational life of his state and of the na-

tion caused great surprise recently by resigning his post to accept a lucrative connection with a commercial enterprise. The reasons given by the educator were that he desired to improve his financial conditions and thus provide against possible privation in old age.

The departure of this splendid schoolmaster from the school field brings into discussion once more the question of compensation for school superintendents. In this country where opportunity for better incomes arise with considerable frequency it does not follow that the old adage "once a schoolmaster, always a schoolmaster" holds entirely good. The versatility which some professional men possess enables them to enter the channels of commerce and trade and meet with success.

The contention made that there is a business side to every profession applies with equal force to the calling of the educator. The schoolmaster sells professional service for which he should command the best possible compensation and working conditions. Appointment, promotion, and salary are all matters of business.

The immediate question, of course, is whether the school superintendency calling commands the remuneration at this time to which it is entitled. The answer would seem to be in the affirmative. At least, there has been a tendency during the past ten years in the direction of better compensation. Boards of education have sought a higher order of ability than ever before, and have been willing to pay the price. In many instances the smaller cities have paid large city salaries in order to command the best talent.

It is also safe to say that the official tenure of the school superintendent is longer at this time than it was a quarter century ago and that the shifts which have taken place have been more largely at the instance of the schoolmaster than of the school board. The migration of superintendents is today, as it has been for many years, from the smaller to the larger centers of population, and towards better remuneration.

It must be said for the American schoolmaster that the spirit of enterprise which he manifests in his professional service has also tended to broaden his vision and to enable him to a better appreciation and understanding of the world of business. His interest in the activities that make for economic stability have in nowise impaired his services as a schoolmaster-executive, but moreover have strengthened his efficiency therein.

There are today school superintendents in the United States who, as such, are rendering eminent service to the cause of education, and who at the same time are giving part time service as a bank director, or director of some industrial or commercial enterprise.

It stands to reason that the educator who is laying something by for old age must necessarily in time become an investor. He may own a home, but he must have investments beyond this if he is to derive an income after his professional career has ceased, unless he can rely upon a pension. Thus school superintendents have invested in real estate, in stocks and bonds, and in some instances have accumulated a comfortable fortune. Many draw a fine income from textbook royalties.

As a rule, a love for the calling holds both men and women in it. The professional spirit is, after all, something fascinating and real. The fact that the world of business lures the professional man into its folds may cause an occasional loss to ranks of education but it has its compensating feature in that it wakens appreciation for the economic side of things. It tends to remind us that while commerce and industry place a money value upon men's services education cannot ignore this rule.

THE MILLER NATATORIUM-GYMNASIUM

When a name is conferred upon a school edifice it is usually that of a departed hero, either of a soldier or a statesman. It is seldom that men during their lifetime are thus honored. Equally seldom is it that the name of an educator is commemorated in the naming of a school structure. The new high school natatorium-gymnasium at Aberdeen, Washington, was named, however, after George B. Miller, who is now the superintendent of the schools of that city. His remarkable interest in the youth under his charge has prompted the public to give an appropriate expression of its appreciation.

The building is situated near the Stewart athletic field. While the building has a rather plain exterior, its internal arrangement and equipment are of the best. It consists of a swimming tank, two gymnasiums, as well as shower rooms, more than 100 dressing compartments, rest rooms, a laundry room and a heating plant.

The gymnasium and natatorium was constructed and will be owned by the associated students of the Aberdeen schools. The manual training department, under the direction of Mr. G. E. Huntley, had a large share in the erection of the building. The individual dressing rooms and doors were built by them in the school shops during the year and were put in place since the completion of the building.

The swimming tank is 75 feet long by 30 feet wide, and has a depth ranging from 18 inches to 10 feet. The pool is equipped with two large filtration tanks, a chlorating machine, all worked by a pumping system, and insuring complete recirculation of the tank every six hours. The system is in constant operation while the tank is in use so that there is practically 100 per cent purity of the water at all times. A swimming temperature is maintained by an automatic heating system. The tank is surrounded by galleries having a capacity of 750 persons. There are 116 dressing stalls, equally divided into compartments for men and women.

The gymnasium is 64 feet by 101 feet in size. It contains a standard basketball court, balconies seating 500 to 600 persons and temporary bleachers around the sides seating 1,000 persons. The locker rooms are just off the gymnasium floor, and there is a drying room for towels, football equipment and other apparel. The junior high school gymnasium has an area of 46 feet by 64 feet and is adjacent to the larger gymnasium. It contains a standard basketball court.

One entrance offers access to and from the athletic field. This entrance enables football, baseball, and other athletes to go direct from the field to the building. There are two more sets of showers near the entrance and locker rooms for each team are available.



THE MILLER NATATORIUM-GYMNASIUM, ABERDEEN, WASH.

The building is heated by vacuum steam. A forced ventilating system forces heat into all the units, from the large gymnasium down to the smaller dressing stalls. The building contains a special laundry unit, where football materials, towels, and uniforms may be washed. An efficient electrical system has been installed, which enables the flooding of the unit rooms with a powerful white light, or with any degree of light, down to almost a shade. The tank and gymnasiums have skylights and are lighted by daylight the greater part of the time.

The building was erected at a cost, including donations and labor by the boy students, of \$75,000. The financing of the building was taken care of by a \$40,000 first mortgage, with the building as security. A second mortgage loan of \$25,000 was obtained through the efforts of the associated student body. The first mortgage carried interest at six per cent, and the second six and one-half per cent.

A STUDY IN BUDGET MAKING

School financing in Pennsylvania has become a problem in most school districts, and must receive more intelligent consideration if school authorities are to be able to continue their

exist in the different items of school expenditures, the following table of comparative statistics was prepared by the county superintendent's office for Beaver County, based upon the total expenditures of the representative boroughs of the county under county supervision: Aliquippa, Baden, Beaver, Bridgewater, College Hill, Conway, Freedom, Kopple, Midland and Monaca.

The budget items are those of the department of public instruction used in making the annual financial reports of the school districts to the department.

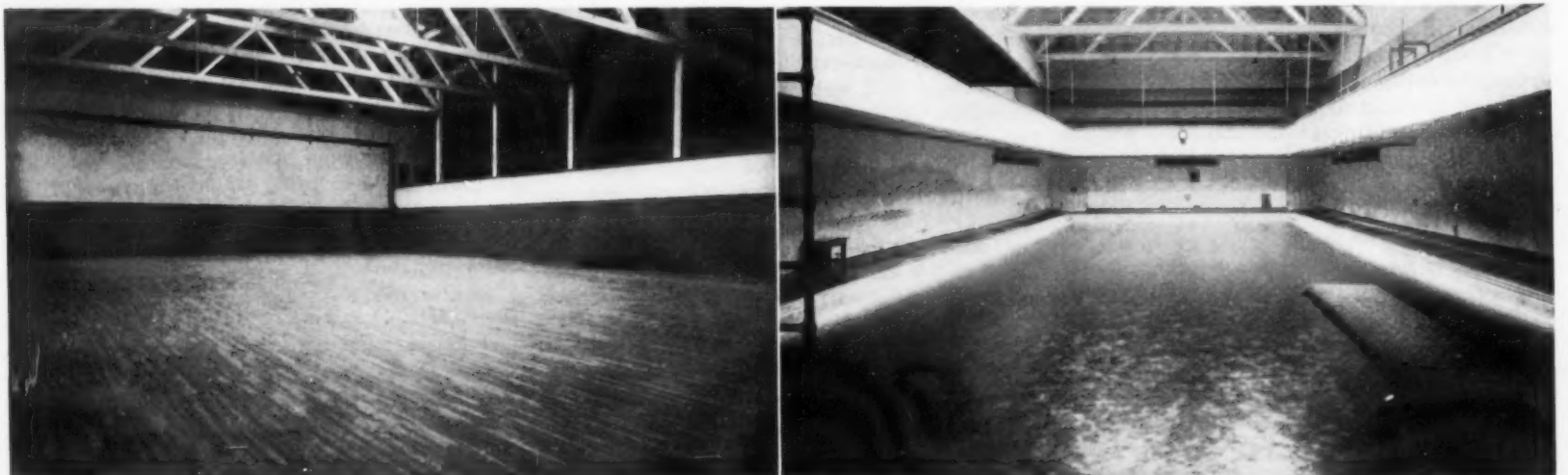
The table shows that the combined expenditures of the boroughs named increased almost one hundred per cent in the given period of five years. It also shows that while the expenditures increased, the ratios of expenditures on the different budget items has varied but little during the same period of time. While the wages of teachers have been increased very materially during the five-year period, the other budget items have kept exact pace. The table indicates that the ratios on school expenditures have not materially changed in the last twenty years. The Beaver County towns are repre-

Budget Items	1919-20	%	1924-25	%	Total 1919-25	%
General Control	\$ 13,890.99	.042	\$ 25,816.62	.041	\$ 126,010.47	.040
Instruction	182,273.04	.528	348,717.93	.554	1,622,628.37	.510
Auxiliary Agencies	6,529.48	.020	14,037.93	.022	65,059.55	.020
Operation	33,954.75	.104	50,409.75	.080	242,296.22	.080
Maintenance	9,029.30	.028	19,845.03	.032	79,968.21	.025
Fixed Charges	7,089.13	.022	18,601.62	.029	71,685.70	.022
Debt Service	73,438.02	.225	74,939.29	.120	599,087.55	.188
Capital Outlay	9,933.81	.031	76,783.93	.122	364,215.17	.115
Total Cost	\$326,138.52	100	\$629,152.10	100	\$3,177,951.21	100

schools in the present high state of efficiency and yet keep within the available revenue.

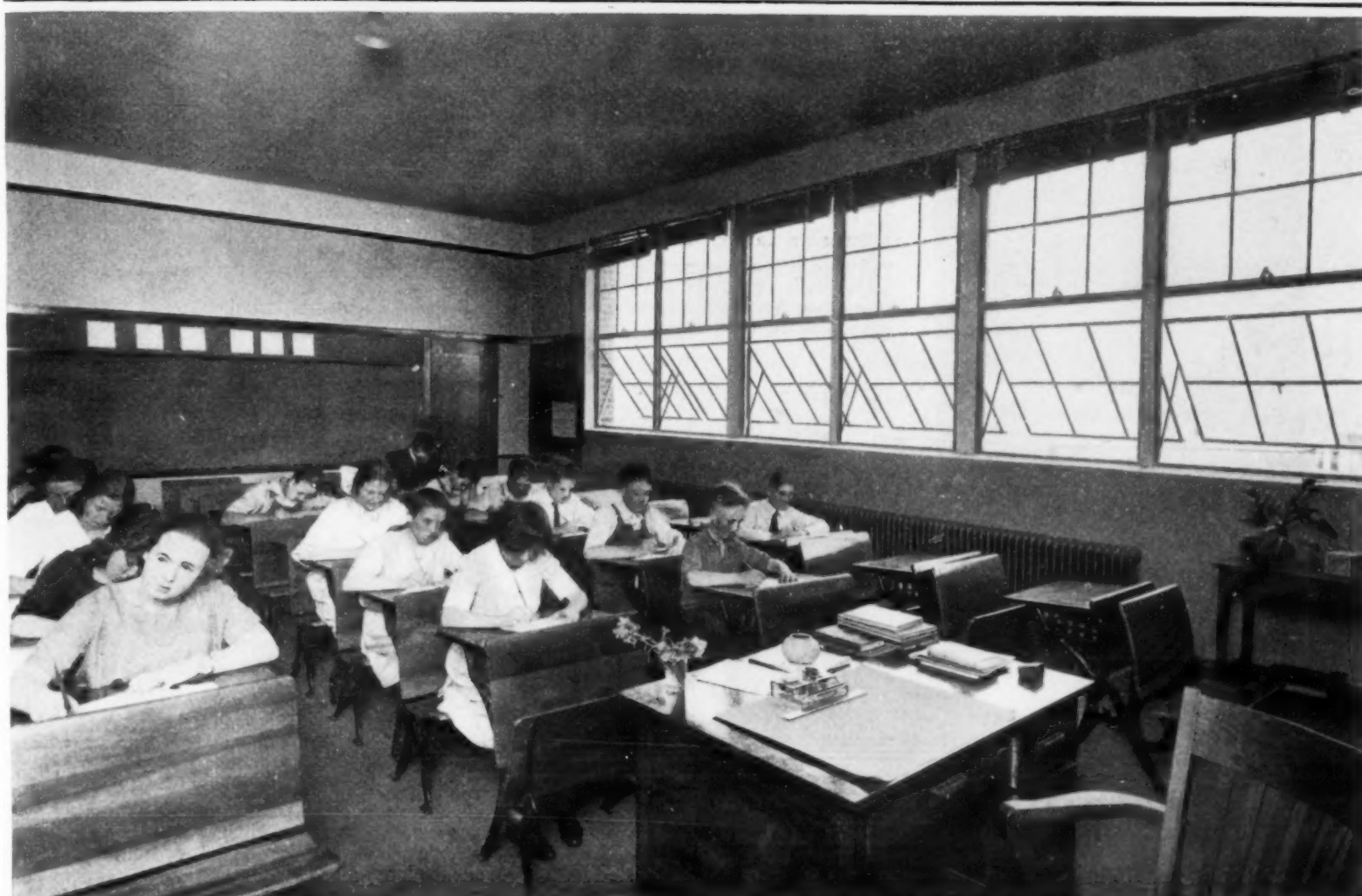
In order that school boards may have the advantage of certain ratios and deductions that

sentative of the state and the above percentages may be the means of assisting school boards generally in apportioning their school funds according to the above findings.



INTERIOR VIEWS OF THE MILLER NATATORIUM-GYMNASIUM, ABERDEEN, WASH.

*Everybody agrees to this!
Schools should be cheerful inside*



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PARENTS, whose children are under public supervision eight hours a day; teachers, who assume responsibility for students' welfare—everyone interested agrees that schools should be *cheerful* places, where health is adequately protected by every means available.

To create cheerful school rooms is largely a matter of having windows

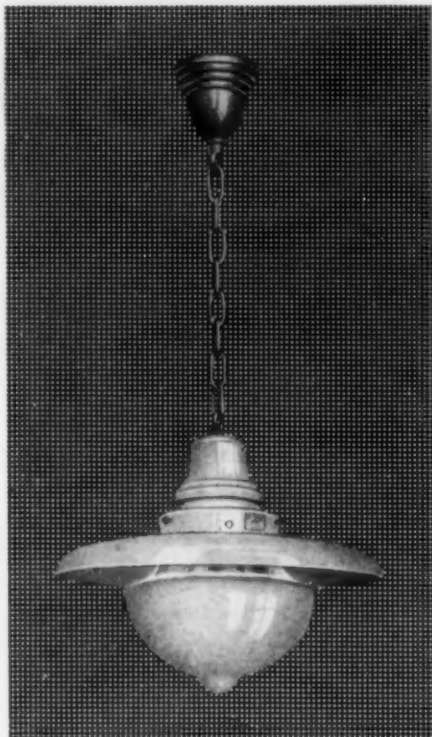
that pour daylight into them. To keep school rooms healthful is chiefly a problem in ventilation.

And because Fenestra Reversible Ventilator Windows are designed to flood the school with daylight, made to easily control ventilation—they are the choice of many of the most modern school builders throughout the country each year.

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Education
1927 MEETING, DEPARTMENT OF SUPER-
INTENDENCE

Dallas, Texas, has been selected as the meeting place for the Department of Superintendence for its 1927 meeting, which will be held the week beginning Sunday, Feb. 27. Headquarters, registration, general sessions and exhibits will be in the Fair Park Auditorium and Exhibit Hall. No hotel will be designated general headquarters.

The Fair Park Auditorium in which the general sessions will be held is a modern building erected for convention purposes. The main auditorium seats 5,000 persons. In addition it contains committee rooms and rooms for small meetings.

The exhibit hall, located across the street from the auditorium, is approximately 60,000 square feet in area. This is considerable more space than in the Washington Auditorium where the exhibits were displayed at the last meeting.

In selecting Dallas the executive committee took into consideration not only the auditorium available but the hotel accommodations. Dallas has 25 hotels on the list distributed by the Dallas Convention Department of the local Chamber of Commerce with 4,000 rooms sufficient to accommodate 12,000 persons. The nine largest hotels can accommodate 7,500 guests. Fort Worth, less than an hour's ride by trolley or bus, has guaranteed 1,000 rooms if needed, and the Texas superintendents are planning to stay in that city so that out-of-state guests may be accommodated in Dallas.

In selecting Dallas the executive committee gave consideration to the entire question of future meeting places of the department. This is well explained in a letter sent to the members by Randall J. Condon, president of the department and superintendent of the Cincinnati school system. The following is quoted from it:

"Before the executive committee attempted to answer that question for 1927, they made a careful survey of the entire country, and took

into consideration the obligation of the Department to its entire membership—east and west, north and south—and of the service that this great organization of school administrators owed to the entire nation, as a national not a sectional association. They decided that the interest of the entire membership, would best be served, during a four-year period, by holding one meeting in the southwest, one in the northeast, one in the west and one in the middle west. Our desire to recognize the south, and at the same time to make the place of meeting as accessible as possible to the west, and the fact that no meeting had been held west of Chicago or south of Cincinnati since 1917, led us to select Dallas, Texas, for 1927, with the recommendation to succeeding executive committees that the next three meetings be held in the north Atlantic area, in a western city and at a centrally located city.

Such a program would help to even up for all the members the traveling expenses and time consumed in attending the meetings, and would be no more expensive during a given period of years for those who regularly attend; while the influence of the meetings, and the opportunity to reach many superintendents of smaller places who have never had the inspiration of attending one of these great meetings would be largely extended.

AMERICAN COUNCIL ON EDUCATION

The ninth annual meeting of the American Council on Education was held during the past month at Washington. Representatives from all parts of the United States were present. Most of the discussion had to do with college and university problems as these are the major interests to its constituents. One step of interest to public school officials was the amending of the constitution so that business, industrial and other organizations "cooperating with educational institutions in improving instruction" may become institutional members of the Council. Neither the word *business* nor *industrial* is used in the amendment, although at first recommended. It is the intent of the Council to make it possible for such organization doing educational work, or cooperating in such work, to have an active word in the Council's program, thus bringing industries and educational institutions closer together.

A second amendment makes the U. S. Commissioner of Education an active member of the executive committee of the Council. This action was taken so that the Council and the Bureau may work in closer cooperation.

At the meeting the U. S. Commissioner of Education announced the appointment by himself of a **National Committee on Materials of Instruction**. In addition to what its name suggests, the committee will attempt to correlate work done on curriculum studies by various government and State officers and by educational agencies. The exact program will be announced later.

FEDERAL DEPARTMENT OF EDUCATION BILL

Newspaper reports circulating during the past month to the effect that the Education Committees of the U. S. Senate and the House of Representatives have voted not to report out the Curtis-Reed Department of Education bill, is misleading. What seems to be the facts are the following:

The House Committee has taken no vote. Members, however, agree, when asked in regard to a rumor, that informally they have decided to take no action during the present spring and summer. The measure remains before it and action may be taken in the fall.

The Senate Committee action has been positive. It has reported out unanimously the Phipps Bill for an expanded Bureau of Education, thus expressing its preference in an unmistakable manner. It is this action that has led the press to report the Curtis-Reed Bill dead.

The Phipps Bill was reviewed in these columns last month. Briefly, it defines the powers and functions of the U. S. Bureau of Education, provides an Assistant U. S. Commissioner of Education, provides an increased appropriation for the Bureau's work of \$250,000, and provides two national educational committees: *The Federal Council on Education* and the *National Council on Education*. The first would have on it representatives of the Federal Executive Departments, the second would be composed of fifteen persons selected by the Commissioner of Education, representing various public and private educational interests. Their functions would be entirely advisory.

(Continued on Page 80)



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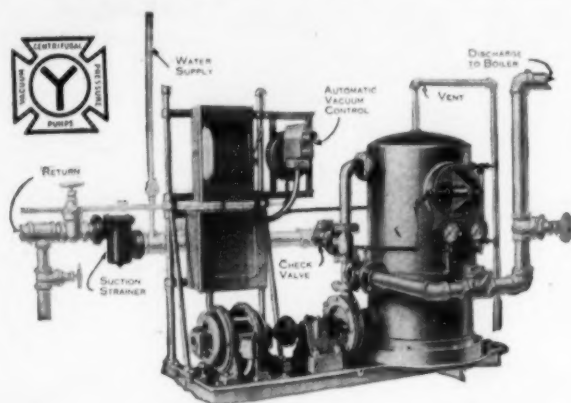
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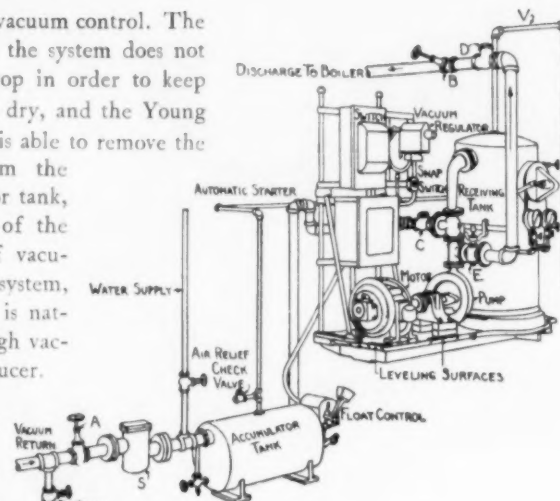
The Young Centrifugal Vacuum and Boiler Feed Pump does not have to be placed in a pit where it is subject to flooding in order to remove the water from low returns by both gravity and vacuum. The pump can be placed on the boiler room floor which drains into the sewer and an accumulator tank is placed in a pit below the level of the return into which the water of condensation will flow by gravity at all times and keep the returns dry. A float switch is mounted on this tank to operate the pump automatically, independent-



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(Continued from Page 78)

Plan of Promotion of Administrative Principals in Washington

Under an Act of Congress passed a year ago providing for the classification and salaries of teachers in the District of Columbia, it has become necessary for the school board to devise means of promotion of administrative principals, and of teachers from "Group A" to "Group B," which means from a lower salaried group to a higher salaried group.

In order to get a workable plan acceptable to all concerned, Frank W. Ballou, superintendent of schools, recently requested the teachers' council of the District to consider the matter and make recommendations. In the superintendent's request to the council he raised the question of prerequisite educational standards for persons who desire appointment to administrative and supervisory positions.

1. Should a college degree be considered necessary for a person who desires to be considered for such a position?

2. If so, how long a time should be permitted before this standard should be required?

3. Should a limited number of professional courses be required?

4. Should a written examination be a part of the test of rating prospective principals, or is a credential examination preferable?

The teachers' council appointed a general committee to make a study of the subject and make recommendations. These were accepted by the council and submitted by it to the superintendent of schools. In it they state:

"After diligent and searching inquiry into accepted and proposed standards we find a unanimity of opinion in one respect—that principals now in the service and all who aspire to such positions should be satisfied with nothing less than the highest and best the educational field has to offer in the matter of breadth of knowledge, the philosophy of education, the technique of teaching and of administration and supervision; and that all should strive constantly to attain to the ideal excellence, which the dignity and importance of the position demands."

"Not many of the best schools of the country have been able yet to attain their ideals, but it

does appear that the weight of opinion is on the side requiring a college degree as a prerequisite for an administrative principalship. However, without exception, all authorities recognize successful experience, continued professional study, highly efficient service, and dynamic, magnetic personality as absolutely necessary prerequisites for administrative positions."

"Therefore, in order that the present efficient teachers may have sufficient time to obtain a degree without detriment to school work, your committee recommends that a college degree shall be a prerequisite educational qualification five years after announcement of the ruling has been made, and that, in the meantime, the following equivalents be accepted by the board of education in lieu of the aforesaid college degree."

Equivalents for College Degree (120 semester hours required).

(1) Graduation from accredited high and normal school—48 semester hours.

(2) Successful teaching experience each 4 years or major fraction thereof—10 semester hours.

(3) Successful experience as principal and evidences of professional spirit each three years or major fraction thereof—10 semester hours.

(4) Professional extension work within the last preceding fifteen years, to include not less than three lines of work in administration, tests and measurements, supervision, principles of teaching.

The final plan for promotion of administrative principals includes the following requirements:

(1) Educational Preparation, 150; (2) Teaching Ability and Experience, 250; (3) Professional Interest and Growth, 100; (4) Personal Equipment, 150; (5) Civic Interest, 50; total, 1,000.

Dr. Ballou in his letter asking recommendations concerning the promotion of persons from Group A salaries to Group B salaries, states some general principles which in his judgment should be observed in formulating the plan of promotion. They are:

"I. Whatever plan is devised for evaluating the qualifications of individuals for promotion to Group B, that plan should make provision for

giving each individual a discriminating rating.

"This appears to the superintendent to be a necessity since the number of persons promoted to Group B salaries must depend upon appropriations, and since further, the number of such salaries available never corresponds to the number of persons who have reached the maximum salary to Group A.

"II. The names of persons qualified and eligible for promotion to Group B within any salary class should be arranged in an eligible list in accordance with their respective ratings.

"The Superintendent believes that the same practice in establishing an eligible list which has prevailed in the original appointment of teachers to service should likewise prevail with respect to promotions to Group B salaries.

"III. The plan of promotion to Group B salaries should make such provisions for advancement of persons within the several salary classes as will deal fairly with the persons in the various groups.

"For example, the rights of the small number of persons employed as librarians in class 4 must be as definitely conserved, protected and respected as are the rights of the persons who constitute our largest group of teachers, namely, those in salary class 1 of the elementary schools."

These recommendations have been taken into account in the plan of promotion of teachers to Group B approved by the teachers' council. They are as follows:

Plan for Promotion of Teachers to Group B

Before being eligible for promotion to Group B, (1) a teacher must have reached the maximum of his group; (2) his last three ratings must have been "E" or "E.S."; (3) he must have been in the Washington schools for the five years preceding consideration for promotion to a higher group.

Promotions shall be based on: (1) Scholarship, 20; (2) success in teaching, 40; (3) experience, 10; (4) value to school outside of classroom, 10; (5) personal equipment, 10; (6) professional spirit and leadership, 10.

I. Scholarship (20) includes: (a) Preparation for position held, over and above entrance requirements, and acquired since appointment to

(Concluded on Page 85)

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(Concluded from Page 80)

present position; (b) courses taken in education, and in subjects leading to a better preparation for the position held at time of promotion; (c) reading courses pursued in education or bearing a direct relation to subjects taught, since appointment to present position; (d) contribution to cause of education through articles published.

II. Success in teaching (40) includes: (a) All factors considered in annual rating.

III. Experience (10) includes: (a) Two credits, up to ten, for each year's service over and above the service required for reaching the maximum of Group A or Group C. To receive this credit, however, the teacher's rating for the given year must be at least "E."

IV. Value outside of classroom (10) includes: (a) Work in extra-curricular activities; (b) ability in routine record work, work as section teacher or equivalent; (c) cooperation with principal and other supervisory officers.

V. Personal equipment (10) includes: (a) Appearance, health, voice, industry, self-control, promptness, punctuality, tact, personality, initiative, adaptability and judgment.

VI. Professional spirit and leadership (10) includes: (a) Interest in school as a whole, knowledge of home conditions of pupils, cooperation with officials, civic and community interest, membership in educational and professional organizations, attendance at educational meetings.

The Teachers' Council

The teachers' council referred to is an organization of much value in the District of Columbia school system. It has been in existence for nearly five years and has proven its worth.

Its purpose is expressed in its constitution:

"The teachers' council should be the means whereby the board of education and the superintendent on the one hand and the teaching corps on the other may arrive at a mutual understanding of school problems. The council should occupy the position of a liaison officer. It should be an agency for instruction in school matters of the board of education, the superintendent, the officials, and the teachers.

"The teachers' council should be an advisory, not an administrative body; it should realize that it is not to usurp the prerogatives of the board or of the superintendent; it should not be a body

for merely destructive criticism. Each delegate should represent fairly and frankly in the deliberation of the council the views of the group which he represents. Endeavor should be made to have all the discussions of the council lead to action that is helpful and constructive."

The council is composed of 38 persons representing the various branches of the school system. The representation is as follows:

Teaching group	21
Supervising group	4
Administration	9
Clerical staff	2
Janitorial staff	2

The teaching group is divided as follows:

Kindergarten and primary	6
Intermediate grades	6
Specials	2
Junior High School grades	2
High Schools	3
Normal Schools	2

The total representation in each group is divided between the white staff and the colored staff. Of the grand total of 38, sixteen are colored, 22 are white.

Each representative is selected by election by the group he represents. These groups in the case of the teaching staff are determined by the administrative school divisions into which the district is divided. The representative reports back to his own group the activities of the Council, and receives instruction from his group relative to needs, desires and opinions.

The teachers' council was approved by the board of education in November, 1921, including its establishments, purposes and plans.

A Study of Supervision

A comprehensive study of school supervision, its purposes, means, spirit and achievement is being made by the administrative officers and supervisors of the District of Columbia public schools.

Five committees are at work, each with representatives of the supervising principals, directors, principals, heads of departments, and administrative principals, totaling fifteen in number. Each person on each committee has made a study of one phase of the subject. Their papers are being read before the entire assembly of nearly 200 officers for discussion. They will be digested later by the chairman of the five sections and prepared in mimeograph or printed form for distribution to the members.

The five subjects are: I. Purpose of Supervision; II. By Whom and How Supervision

Should be Carried On; III. The Spirit of the Supervisor; IV. The Qualifications of the Supervisor; V. The Results to be Achieved in Supervision.

Appropriations for District of Columbia Public Schools, 1926-27

Congress has passed the Appropriation Bill for the public schools of the District of Columbia for 1926-27, carrying a total of \$11,283,077. Of this amount \$2,672,500 is for new buildings under the five-year building program, leaving \$8,610,577 for current expenses, in which is included care of buildings and grounds, and repairs and improvement.

The principal items of this appropriation are:

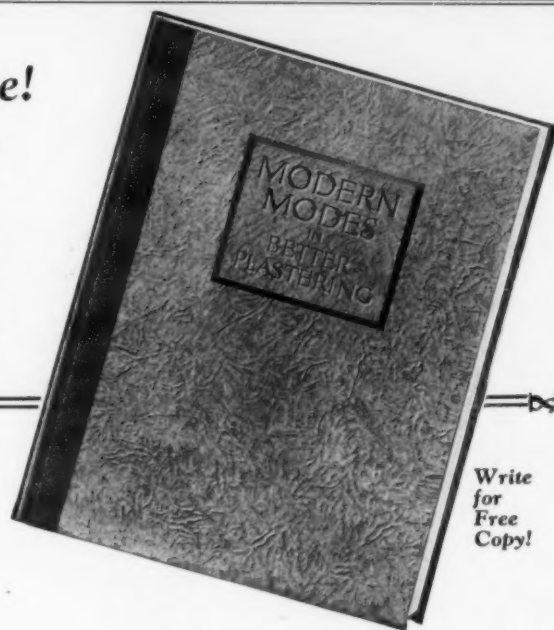
Salaries of Officers	\$ 630,300
Salaries of Clerks	109,500
Salaries of Attendance and Work Permits	29,900
Salaries of Teachers and Librarians	5,564,300
Salaries, Night Schools	90,000
Salaries, Hygiene and Sanitation	65,000
Salaries, Hygiene and Sanitation	65,800
Care of buildings and grounds	545,000
Fuel, gas, electricity	250,000
Repairs and improvements	475,000
Furniture and equipment	200,877

The total appropriation for the District's schools for the year is \$805,260 less than for the present year. The decrease, however, is in the building program appropriation, not in the current expenses and maintenance. The building appropriation is less than the present year by \$1,504,000.

A study of the various steps in securing actual money for the district schools shows one of the greatest difficulties the school system faces. The superintendent makes his estimates which he presents to the board of education. After revision these are forwarded to the district commissioners who cut and prune usually without much definite information of the actual situation. They then go to the U. S. Bureau of the Budget for its consideration and approval, and finally to Congress for its action.

For the coming year the board of education had estimated \$13,563,863 would be needed. The district commissioners cut this to \$12,279,633, and the Bureau of the Budget to \$11,283,077, the amount actually appropriated by Congress.

Eliminating the amounts requested for the building program, the board's request was for \$9,175,113. This the district commissioners trimmed to \$8,897,133 and the Bureau of the Budget to \$8,610,577.



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SCHOOL LAW

School Lands and Funds

A petition signed by the majority of voters of an independent district and proposed annexed territory is held sufficient to give the county board jurisdiction of proceeding to annex territory (Minnesota special laws of 1891, c. 328; G. S. 1923, §§ 2743, 2744, 2748).—Independent School Dist. of St. Paul Park No. 36 of Washington County v. Independent School Dist. of Newport No. 68 of Washington County, 206 N. W. Reporter (West) 719, Minn.

The fact that a person had purchased a home outside of the district, and had moved with his family to a newly purchased home and rendered his children in the scholastic census of the town, is held to sustain a conclusion that he was not a resident of the school district from which he had moved, entitled to vote at a consolidation election.—Hill v. Mays, 278 S. W. 919, Tex. Civ. App.

The owner of land, removed from a district where it was located, is held not a legal voter at a consolidation election.—Hill v. Mays, 278 S. W. 919, Tex. Civ. App.

A widow, who had removed from a school district, and had not resided therein six months preceding a consolidation election, is held not a qualified voter.—Hill v. Mays, 278 S. W. 919, Tex. Civ. App.

A widow, owning a life interest in land in a school district, and spending all her time with her married children, is held not a resident of the district entitled to vote at a consolidation election.—Hill v. Mays, 278 S. W. 919, Tex. Civ. App.

School District Property

A notice by the board of education to materialmen, of an intention to pay a contractor direct, cannot relieve a board of liability for failure to take a bond (Georgia laws of 1916, p. 94).—Board of Education of McIntosh County v. United Supply Co., 131 S. E. 292, Ga. App.

A notice by the board of education to a materialman of their intention to pay the contractor direct is held not to estop him from

asserting his rights under the Georgia statute laws of 1916, p. 94.—Board of Education of McIntosh County v. United Supply Co., 131 S. E. 292, Ga. App.

Where the board of education contracted for the construction of public work, and by reason of the insolvency of the contractor and the failure of the board to take a statutory bond, a materialman suffers loss, he may, under the Georgia laws of 1916, p. 94, recover therefor against the board.—Board of Education of McIntosh County v. United Supply Co., 131 S. E. 292, Ga. App.

The county board of education is liable to be sued under the Georgia laws of 1916, p. 94, by a materialman, suffering a loss because of the failure of the board, in letting a contract, to take a statutory bond for materialman's protection.—Board of Education of McIntosh County v. United Supply Co., 131 S. E. 292, Ga. App.

A verdict and judgment for a materialman, suffering a loss because of a school board's failure to obtain a statutory bond from a contractor, is held authorized.—Board of Education of McIntosh County v. United Supply Co., 131 S. E. 292, Ga. App.

A school levy for "building and repairs," is illegal, when the total levy would exceed \$1 on each \$100 of valuation, permitted by the Missouri constitution, art. 10, § 11.—Lyons v. School District of Joplin, 278 S. W. 74, Mo.

Teachers

A trustee was unauthorized to discharge a school teacher after requesting her to teach subjects for which she did not hold a license.—Jefferson School Tp. of Miami County v. Graves, 150 N. E. 61, Ind. App.

Pupils

The Minnesota charter is held to confer on a board of education the power to make and to enforce the rules excluding children who are a menace to their associates.—(Minnesota constitution, art. 3, § 1.—Stone v. Probst, 206 N. W. 642, Minn.).

A rule of the board of education, excluding from school children who are a menace to their associates, is a valid exercise of police power.—Stone v. Probst, 206 N. W. 642, Minn.

A rule of the board of education, excluding a child from school until the presentation of evidence of good health, is held not unfair, arbitrary, or unreasonable under the Minnesota

General statutes of 1923, (§§ 2998, 3080, 3083).—Stone v. Probst, 206 N. W. 642, Minn.

—An application filed in the court at Cape Girardeau, Mo., to restrain the board of education of Charleston, Mo., from enforcing its rule barring married women from attending school was refused in a decision rendered by the judge.

LAW AND LEGISLATION

—The question was raised in Illinois as to whether a schoolbook salesman could hold the position of county superintendent of schools. The attorney general holds that if the applicant possesses the educational qualifications there is no law that can prevent him from serving as county superintendent if so elected.

—A boy at Sequim, Washington, stepped out of a school bus and was run over by a passing car, breaking both of his legs. His parents brought suit for \$25,000 against the bus driver and the school district. The court awarded \$6,250. The case has been appealed. The district carried insurance. The decision has caused some surprise, and the final result will be watched with interest by the school officials of Washington.

—The question of compensating an architect's firm for work done has arisen in Racine, Wis. Some few years ago the board of education employed the firm of Perkins, Fellows and Hamilton of Chicago to draw high school plans. The bond issue for the new structure failed and the board paid the firm \$5,000 for the work done. Then the board renewed the contract and secured more work, but a new board came into power. This board nullified the contract and employed Croft and Boerner, a Minneapolis firm, to complete the plans and construct the building. The Chicago firm is now through its attorney urging its claims and it is expected that an amicable adjustment will be found.

RELIGION WINS SCHOOL CASE

The Free Thinkers Society of New York in April brought mandamus proceedings at Albany against Dr. Frank P. Graves, state school commissioner of New York state to compel the White Plains board of education to deny granting pupils to leave the schools thirty minutes a week to enable them to attend religious instructions. The court in denying the petition said:

(Concluded on Page 88)

"MOPPING and MOVING" or CHEMISTRY?

OFFICE HOURS:
8:00 TO 9:30 A.M.
3:00 TO 4:15 P.M.

MCKINLEY HIGH SCHOOL
J. L. G. POTTS, PRINCIPAL
CANTON, OHIO

ASSISTANT PRINCIPAL
H. W. BENEDICT
DEAN OF GIRLS
HELEN J. LOOMIS

February 12, 1926.

The Duriron Company,
Dayton, Ohio.

Gentlemen:

We very much appreciate your letter of February 9th, and the way you have cooperated with us. The literature will be of a great deal of value to the department.

It isn't necessary to remind us that we have Duriron traps and fittings in our laboratory desks. Before we had them about a third of my time was spent in calling the janitor to mop up the floor and moving my students to desks that did not leak. For the last two years, while I have had the Duriron, there has been no trouble, and we are not looking forward to any. It is a great relief.

is Mr. Carl E. Bow. I'm not nearly the bother to him, now that we have Duriron, that I used to be.

Sincerely,

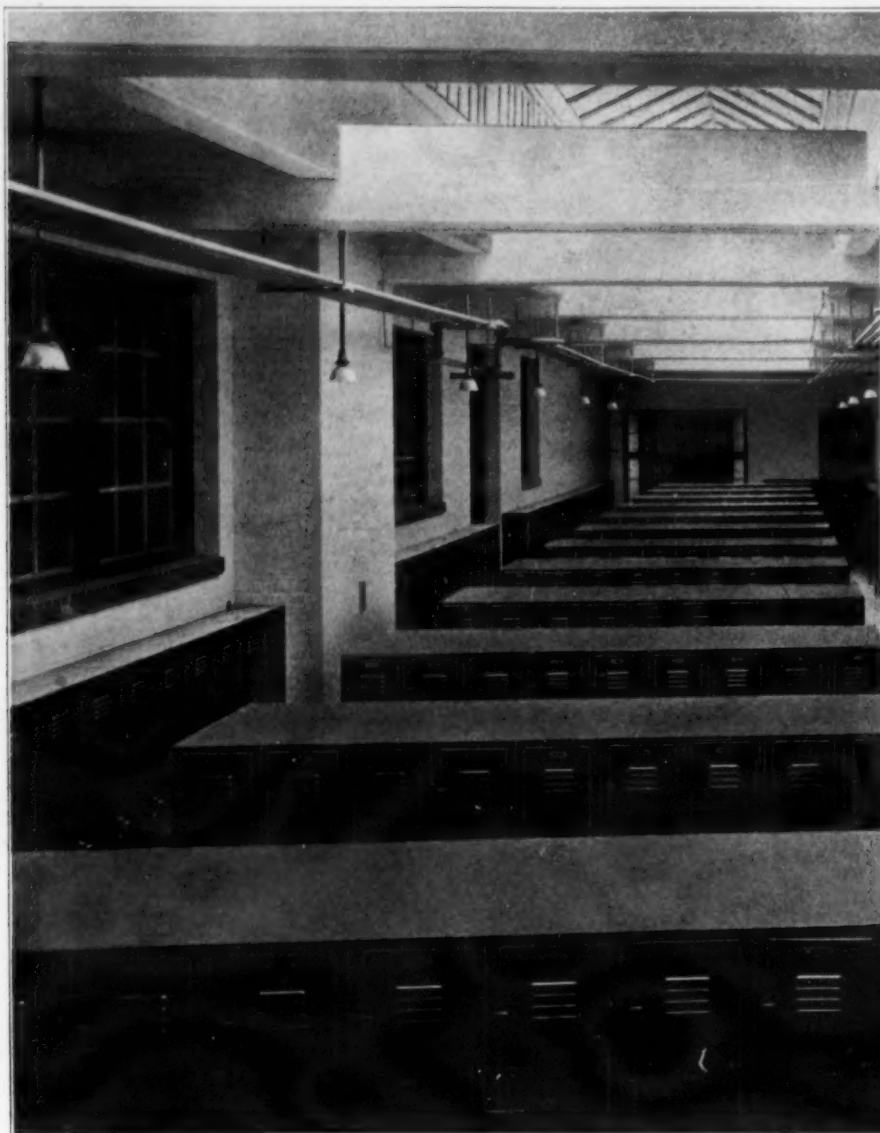
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drain pipe and laboratory equipment ~
It increases teaching efficiency!

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New York, N. Y. Pittsburgh, Pa. Los Angeles, Calif.
Philadelphia, Pa. Detroit, Mich. Newark, N. J.

(Concluded from Page 86)

"The facts in this case establish no violation of this constitutional prohibition. The mere excusing of pupils at the volition of their parents for a half hour period each week to attend religious instruction outside the school and at places unrelated to school activities, in the free exercise and enjoyment of their religious profession, does not constitute the use of public property, credit or money in aid of any institution of learning under the control of any religious denomination.

"The thing prohibited by the Constitution is the use of public property and money for the designated purpose, and, where there is no such use, there is no basis for just claim of constitutional violation.

"In that respect this proceeding differs materially from the facts in the Mount Vernon case, where public property was used for the printing of the excuse cards, which were printed in the School of Industrial Arts by the pupils therein, and that action was declared 'unlawful and in violation of the State Constitution.'

"The requirement of the compulsory attendance law for attendance during the entire time during which public schools are in session is not an arbitrary provision, but is qualified by the allowance of occasional absences not amounting to irregular attendance in the fair meaning of the term.

"These absences are permitted by law upon excuses allowed by the general rules and practice of such school. These rules are prescribed by the board of education in the performance of their duties.

"The board of White Plains or any other school board, and the commissioner in their exercise of discretion in the determination that a rule, which accedes to the request of parents to excuse their children thirty minutes a week for religious instruction, constitutes an absence not amounting to irregular attendance in the fair meaning of the term, may properly give consideration for their guidance and sound judgment to the utterances of the United States Supreme Court and to the appealing weight of the following propositions:

"That the right of the parent to direct the training and nurture of the child is a fundamental right;

"That the obligations of citizenship require the promotion of a spirit of patriotic and civic service and the fostering in children of moral as well as intellectual qualities;

"That the religious conscience, conviction and accountability, are the least dispensable foundations for good citizenship and real patriotism;

"That moral growth and intellectual growth go hand in hand to make the essential elements of character and good citizenship;

"That the right of the state to enforce school attendance does not mean that the mental and moral development of all children must be limited to a common mould, and that all children must be standardized;

"That the regulation does not create a union between church and state, or teach any sectarianism in the schools, or invade the religious freedom or conscience of any individual."

IS THE SCHOOL BOARD LIABLE?

An interesting case on school board liability was decided at Easton, Pa., recently. In 1920 the board of education extended the Vanderveer school grounds by adding the Steckel lot adjoining it. Two years later a number of boys left the Vanderveer lot to play on the Steckel lot where one of them was injured by stumbling into a stray piece of wire which injured his eye.

The father of the boy brought suit against the school directors, consisting of Orville P. Ayers, Allen Carpenter, Thomas A. Mellon, J. Ellsworth Reeser, Dr. Floyd C. Standt, Dr. Frank P. Clark, and Richard J. Lippey based on the law which provides that "The board of school directors of each district shall put the grounds about every school district in neat, proper, and sanitary condition, and so maintain the same, and shall provide and maintain a proper number of shade trees." The plaintiff maintained that the act was mandatory.

The defendants maintained in accordance with a legal decision that "There can be no liability of a school district in Pennsylvania for the neglect of school directors. In *Ford vs. Kendall Borough School District*, 121 P.S., 543, Mr.

Chief Justice Gordon Held: 'A school district is but an agent of the commonwealth, and as such a quasi corporation for the sole purpose of administering the commonwealth's system of public education; it is therefore not liable for the negligence of school directors or of their employees.'

"Under this theory, the question arises: Have the members of the board of school directors, the defendants, been guilty of malfeasance, or misfeasance, or nonfeasance in office and of a public duty so as to constitute neglect for which they are liable in damages?

"Under the authorities, a member of the school board is an officer of a quasi municipal corporation. In Dillon on 'Municipal Corporations,' 5th edition, Vol. 1, Section 436, the following appears: 'In considering the liability of a municipal officer for his acts or conduct, a distinction has sometimes been drawn between grievances which are founded upon a failure or omission to perform a duty, i.e., nonfeasance, and negligence or tortious conduct in the manner of performing his duty, i.e., misfeasance or malfeasance. In many of the states the rule is adopted that for mere nonfeasance of a public duty, an officer is not impliedly liable to any person sustaining injury therefrom. For mere non-performance of a public duty, relating strictly to public as distinguished from municipal duty, no action lies unless given by statute against either the municipality or the officers upon which the public duty is placed, although the non-performance may result in damage to an individual.'

"The statute law of the Commonwealth of Pennsylvania is silent as to the individual liability of a board of school directors for nonfeasance in office, nor is there any rule laid down by the authorities which eliminates any distinction between nonfeasance and misfeasance and makes public and municipal officers liable in personam to persons suffering damage for both nonfeasance and misfeasance."

The court contended that the school directors were not acting in their individual capacity but as agents of the state, hence not liable.

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362 Peoples Gas Building.
CLEVELAND,
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COLUMBUS,
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DETROIT,
2511 First National Bldg.
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TORONTO,
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TRENTON,
339 Broad St. Bank Bldg.
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410 Bond Bldg.
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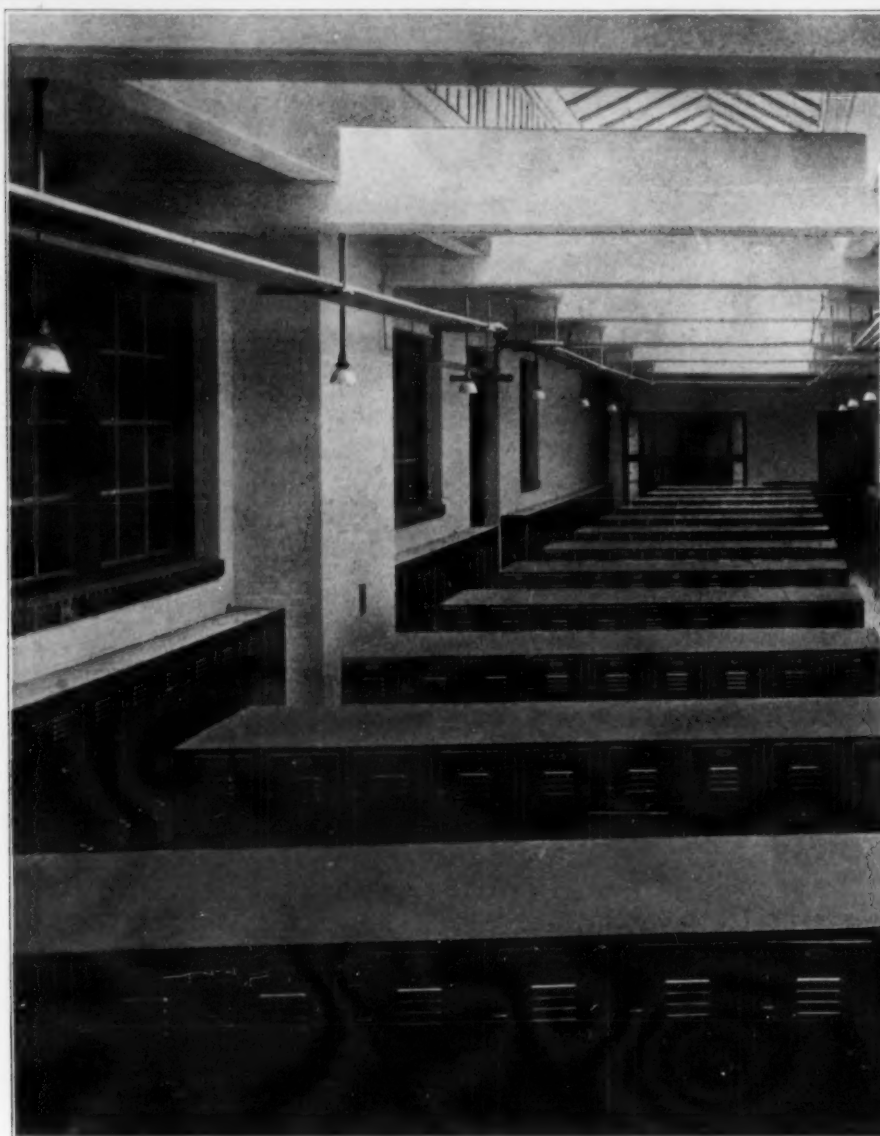
He can successfully combat plaster cleavage, such as results from unequal expansion of plaster and its support. He understands and prevents all the difficulties that assail plaster from the rear.

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is both a product and a service. It is not left to the uncertainties of haphazard contracting, but is applied by men intensely interested in the future of your

job and the future of Par-Lock everywhere. Your specification department should by all means get in touch with the Par-Lock Applier.

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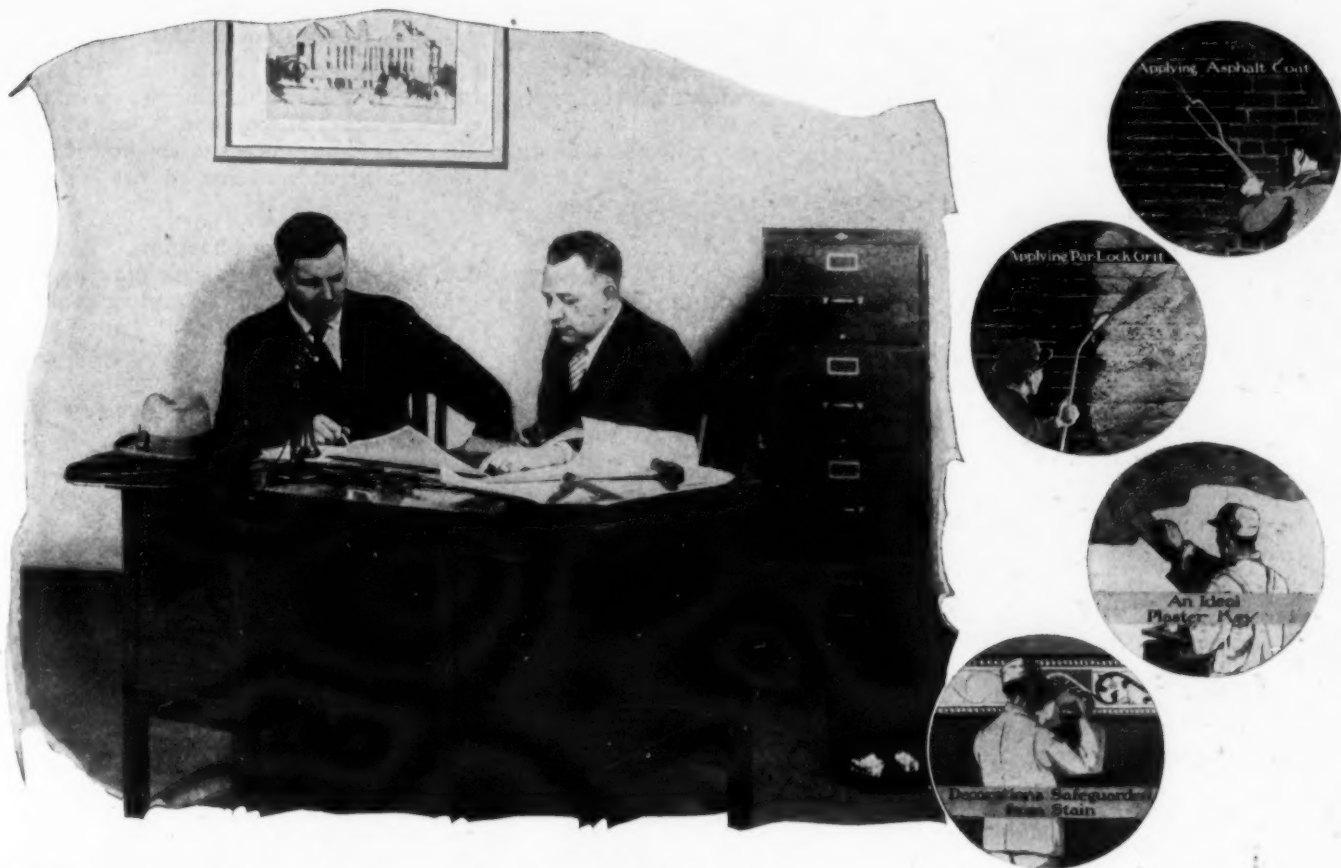
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2258a Bloor Street, West.
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He can successfully combat plaster cleavage, such as results from unequal expansion of plaster and its support. He understands and prevents all the difficulties that assail plaster from the rear.

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job and the future of Par-Lock everywhere. Your specification department should by all means get in touch with the Par-Lock Applier.

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Ideal Flooring for School Shops—BLOXONEND

(Also used extensively in Gymnasiums, Auditoriums, Play Rooms and Similar Locations)



Hawthorne High—Yonkers, N.Y.



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Bloxonend Flooring is ideal for school shop use. It provides a comfortable working surface that prevents fatigue in scholars—is very durable and lastingly smooth. Bloxonend is bright and clean and has a sturdy appearance that harmonizes with shop room equipment. It is being used in a great number of the finer schools throughout the country.

Bloxonend is also used extensively in gymnasiums. Because it is splinter and sliver proof, it is the only really safe flooring for gymnasium use. Athletic instructors, students, and school officials indorse its use.

The illustration at the right is of the end of a long section of Bloxonend. The tough blocks are dove-tailed endwise to long baseboards—the strips are provided with tongues and grooves and may be laid like ordinary flooring. A special nailing arrangement permits the laying of Bloxonend directly over concrete.



Descriptive Booklet "A" contains complete Bloxonend information. Write for it.

Carter Bloxonend Flooring Company
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BLOXONEND
Lays Smooth FLOORING Stays Smooth

PERSONAL NEWS OF SUPERINTENDENTS

SEXTON JOHNSON KILLED

Sexton Johnson, supervising principal at Tampa, Fla., met death in an automobile accident on April 5th. In his death Florida lost one of her most prominent disciples of public education. His death is a loss to the county, to the people, and above all, to the children.

Mr. Johnson was born in DeFuniak Springs, Fla., on September 24, 1890. He was graduated from Rollins College and later completed post-graduate courses at Peabody College and at the University of Florida.

He was appointed superintendent of schools at Orlando following his graduation, serving there for a period of ten years. Fourteen months ago he became supervising principal at Tampa.

Mr. Johnson is survived by his wife and one daughter 6 years old.

The Tampa School Bulletin devoted its entire issue of April 14th to the memory of Sexton Johnson. The local principals' association, the teachers' club, the school children, and many friends contributed resolutions and expressions of regret at the death of their educational leader.

"One of the ablest schoolmen in the state of Florida," J. G. Bedingfield, head of the city school board, said of Mr. Johnson. "My personal loss is very great, as I had grown to love him deeply during the few months I had known him."

—Mr. D. F. Showalter has been elected superintendent of schools at Lebanon, Kans., for another year.

—Mr. W. F. Whiteside of Monticello, Ark., has been elected superintendent of schools at Camden. He succeeds W. F. Hall.

—Supt. James A. Koontz of Joplin, Mo., has been reelected for another year.

—Supt. R. M. Pierce of Jackson, Mo., has been reelected for a fifth consecutive year.

—Mr. Denton M. Albright has been elected superintendent of schools at Rochester, Pa.

—Dr. J. Freeman Guy, supervising principal at Bellevue, Pa., has been elected superintendent of schools.

—Supt. Port Eckles of Homestead, Pa., has been reelected as head of the schools at an increased salary.

—Supt. N. W. Cameron of Norristown, Pa., has been reelected with an increase in salary.

—Supt. G. B. Gerberich of Greenville, Pa., has been reelected for another four-year term. Supt. Gerberich has completed eighteen years of service as head of the school system.



SEXTON JOHNSON,
Supervising Principal of Public Schools,
Tampa, Fla.

—Mr. A. J. Stoddard of Bronxville, N. Y., has been elected superintendent of schools at Schenectady.

—Mr. S. G. Reinertsen of Jackson, Minn., has been elected superintendent of schools at Moorhead.

—Supt. George H. Weiss of Pottsville, Pa., has been reelected.

—Supt. Floyd Atwell of Beaver Falls, Pa., has been reelected for another term of four years.

—Supt. A. D. Endsley of Tarentum, Pa., has been reelected for a four-year term. Supt. Endsley has completed 21 years of service.

—Supt. John E. Holman of Fayette, Mo., has been reelected.

—Supt. L. B. Hawthorne has been reelected at Mexico, Mo.

—Mr. John A. McChrystal of Graceville, Minn., has been elected superintendent of schools at Caledonia.

—Supt. B. F. Shafer of Jacksonville, Ill., has been given a life membership in the National Education Association.

—Mr. H. C. Wegner of Marshfield, Wis., has been elected superintendent of schools at Waupun.

—Mr. E. O. Flenniken of Glydon, Minn., has been elected superintendent of schools at Detroit. He succeeds F. E. Crichtett.

—Mr. G. H. Jaggard of Kingman, Kans., has been elected superintendent of schools at Concordia.

—Supt. J. J. Early of Sheridan, Wyo., has entered upon his eighteenth term as head of the school system.

—Supt. R. W. Bardwell of Rock Island, Ill., has been reelected for another year.

—Mr. P. K. Cesander of Rushford, Minn., has been elected superintendent of schools at West Liberty, Ia. He succeeds C. P. Slater who has resigned after six years' service.

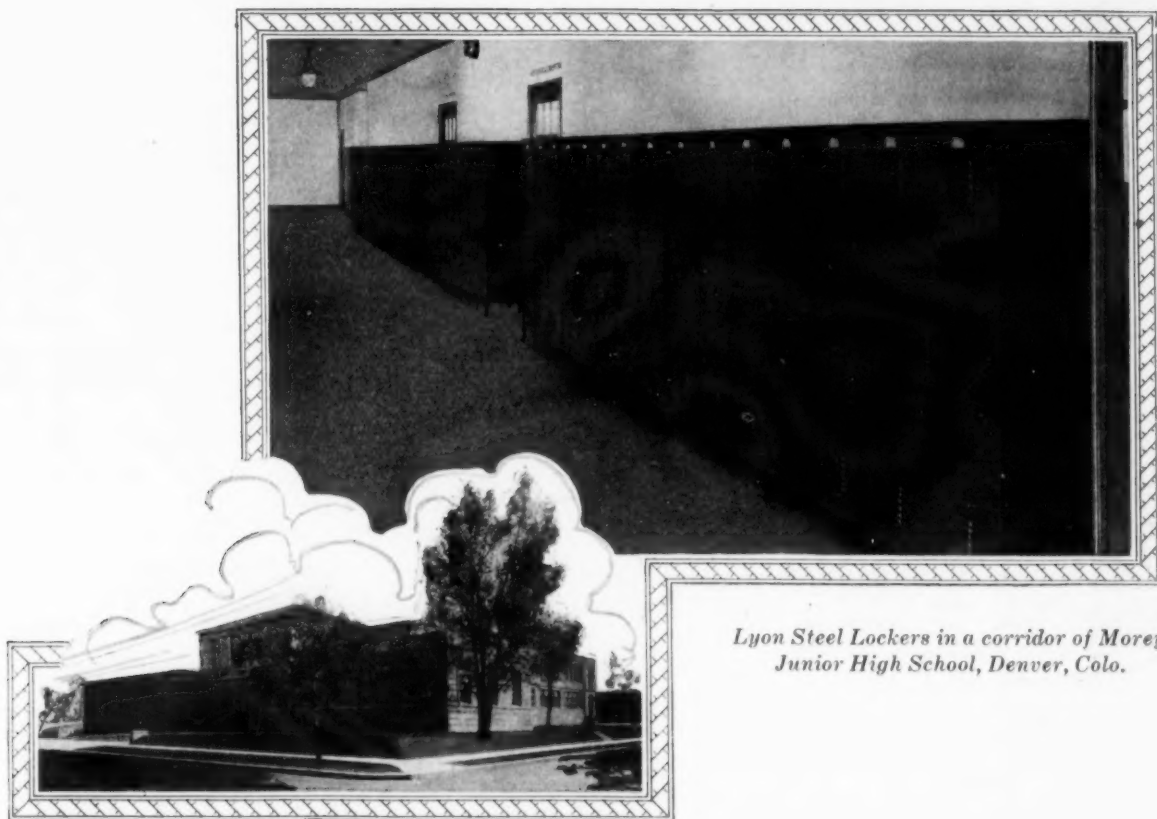
—Supt. T. G. McCleary of Braddock, Pa., has been reelected for a four-year term.

—Mr. W. W. Irwin of Meadville, Pa., has been elected superintendent of schools at Farrell.

—Mr. P. W. M. Pressel has been elected superintendent of schools at Warren, Pa. He succeeds M. H. Deardorff.

(Continued on Page 92)

LYON STEEL LOCKERS



Lyon Steel Lockers in a corridor of Morey Junior High School, Denver, Colo.

17 DENVER SCHOOLS LYON EQUIPPED

The Morey Junior High School of Denver is one of seventeen schools in that one city for which we have supplied locker equipment. One installation ran to 1200 Lyon Steel Lockers. Such an order is a vote of confidence.

In these Denver schools there are recessed lockers—lockers built right into the walls of the structure—as well as the standard type of Lyon Steel Locker shown here.

That perfect alignment so evident in this view is permanent. The strong frames of Lyon Steel Lockers hold them in line—like soldiers under parade ground discipline.

There is lasting beauty in a row of

Lyon Steel Lockers, for the finish is pleasing and durable. The rugged doors will not sag or jam. They successfully withstand long, hard use. There is economy in Lyon durability. Denver's record is evidence of that and so, too, are the records from all sections of Colorado where there are installations of Lyon Steel Lockers in such institutions as the Colorado State Agricultural college and the Colorado State University.

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CHICAGO 230 E. Ohio St.
DETROIT 149-159 W. Fort St.
NEW YORK 342 Madison Ave.
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Lincoln, Nebr.
Board of Education,
Middletown, Ohio
Yale University,
New Haven, Conn.
Board of Education,
Elizabeth, N. J.
Board of Education,
Pawtucket, R. I.
Board of Education,
Oakland, Calif.
Board of Education,
Mt. Clemens, Mich.
University of Kentucky,
Lexington, Ky.
State Normal School,
Pottsdam, N. Y.
Independent School District,
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American School for Deaf,
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(Continued from Page 90)

—Mr. R. A. Baum of Oil City, Pa., has been elected superintendent of schools to succeed Leroy Weller.

—Supt. Roy D. Brown of Grant City, Mo., has been reelected for another year.

—Supt. John C. Diehl of Erie, Pa., has been reelected for a four-year term. Supt. Diehl has been connected with the Erie schools for 36 years, and has been superintendent for the last three years.

—Supt. Stephen Blackhurst of Shelby, Mo., has been reelected for another year.

—Mr. M. A. Bye has been elected superintendent of schools at Thief River Falls, Minn., to succeed I. T. Simley.

—Supt. Charles E. Carter of Franklin, Pa., has been reelected for a four-year term.

—Supt. R. W. Truscott of Loveland, Colo., has been elected president of the School Superintendents' Association of Colorado.

—Mr. Lee Thurston of Owosso, Mich., has been elected superintendent of schools at Perry.

—Mr. C. P. Minear of Wyman, Ia., has been elected superintendent of schools at Winfield, to succeed A. R. Bird.

—Mr. H. C. Miller has been elected superintendent of schools at Mooresville, N. C., to succeed E. M. Crouch.

—Supt. E. K. Drake of Liberty, Nebr., has been reelected for the next year.

—Mr. George H. Little has been elected superintendent of schools at Hudson, Mich.

—Mr. L. L. Nolin of Dayton, Wash., has resigned to enter Stanford University. Mr. Nolin will receive a master's degree from the university in September.

—Mr. G. E. Dille has been reelected as superintendent of schools at Chillicothe, Mo.

—Mr. G. B. Clift has resigned as superintendent of schools at Bartlesville, Okla.

—Frederick W. Cook succeeds Henry M. Maxson as superintendent of the Plainfield, N. J., schools. Mr. Maxson, who retires voluntarily, held the position for thirty-four years. Mr. Cook has been with the Plainfield school system since 1915, serving as principal in several schools, as secretary of the board of education, and recently as assistant superintendent. Teachers' Salaries

—Mr. O. W. Craig of Columbia City, Ind., has been elected superintendent of schools at Bluffton, to succeed P. A. Allen.

—Mr. Charles E. Prall has been elected superintendent of schools at Charles City, Ia.

—The board of education at Zanesville, O., has accepted the resignation of Supt. F. C. Kirkendall. The resignation was presented when the board overruled his protests against permitting the local basketball team to participate in the national championship tournament at Chicago.

—Newton Bonham, 52, of Plainfield, Ind., and superintendent of the Coal City schools, died on April 8th, at a hospital, following injuries received in an encounter with a local restaurant proprietor.

—Mr. F. O. Grounds has been elected superintendent of schools at St. Clair, Mich., to succeed O. M. Misenar.

—Mr. Carl M. Horn has been elected superintendent of schools at Bad Axe, Mich., to succeed B. H. Vandenberg.

—Supt. John L. Silvernale of Menominee, Mich., has been reelected for a three-year term.

—Supt. R. C. Knight of Riverside, Ia., has been reelected for the next year.

—Supt. W. L. Iversen of Pullman, Wash., has been reelected for another year.

—Supt. G. C. Woods of Prescott, Wash., has been reelected for the next two years.

—Mr. Carl Nelson has been elected superintendent of schools at Dayton, Wash., to succeed L. L. Nolin.

—Supt. H. F. Heath of Burlington, Wash., has announced his resignation, to take effect in July.

—Supt. F. L. Mahannah of Cedar Falls, Ia., has been reelected for a two-year term.

—Mr. Henry Hamm of Nevinville, Ia., has been elected superintendent of schools at Fontanelle.

—Mr. H. F. Denning of Manchester, O., has been elected superintendent of schools at West Union. He is succeeded by Mr. George R. Bryant.

—Mr. Henry Hoeven has been reelected for another year as head of the schools at Boyden, Ia.

—Supt. M. R. Fayrum has been reelected head of the schools at DeWitt, Ia.

—Supt. A. W. Moore of Oelwein, Ia., has been reelected for another year, at an increase in salary.

—Supt. F. E. Patrick of Bethany, Mo., has been reelected for another year.

—Mr. F. G. Stith has been elected superintendent of schools at Harlan, Ia., to succeed Miss Mary Wyland.

—Mr. B. V. Keister of Norfolk, Neb., has been elected superintendent of schools at Neligh.

—Howard Kelley, 32 years old, died at Aurora, Mo., on March 30th, following an attack of pneumonia. He was superintendent of schools at Aurora.

—Mr. J. R. Vinckle, of Lyons, Nebr., has retired from school work to take up the study of medicine.

—Supt. L. C. Hunt has been reelected as head of the schools of Burlington, Vt.

—Mr. A. N. Smith of Maxwell, Ia., has been elected superintendent of schools at Leon, to succeed O. M. Gass.

—Mr. J. A. Fleming of Bonner Springs, Kans., has resigned to become principal of the high school at Iola.

—Mr. J. H. Ray of McCallsburg, Ia., has been elected superintendent of schools at Sac City.

—Mr. C. E. Heaton, of Clearfield, Ia., has been elected superintendent of schools at Osceola.

—Supt. H. P. Trumbo of Early, Ia., has been reelected for a seventh term.

—Supt. A. W. Coon of Battle Creek, Ia., has been reelected for a fifth term.

—Supt. J. C. Foster of Bethune, S. C., has been reelected for another year.

—Supt. Dale Welsch of What Cheer, Ia., has been reelected for the coming year.

—Supt. H. O. Study of Springfield, Mo., has been reelected for another year.

—Supt. M. L. Brown of Corry, Pa., has been reelected for a four-year term.

—Supt. Charles S. Miller, Latrobe, Pa., has been reelected for a term of four years.

—Mr. S. G. Reinertsen of Jackson, Minn., has been elected superintendent of schools at Moorhead. Mr. Reinertsen completed his academic and normal work at Augustana College, Canton, S. D. He holds a degree from St. Olaf College

(Continued on Page 94)



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Chicago Dental College, Chicago	Children's Hospital, Columbus
Holton Arms Sch., Washington, D. C.	Fifth Avenue Hospital, New York
Wellesley College, Wellesley, Mass.	Jefferson Hospital, Philadelphia
St. Mary's Seminary, Cleveland	Baylor Hospital, Dallas, Texas
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(Continued from Page 92)

and from the University of Colorado, and also pursued some graduate work at the University of Minnesota.

—Supt. James W. Stott of Frankfort, Ind., has been reelected for a three-year term.

—Supt. H. H. Edmunds of Clinton, Ill., has been reelected for his twentieth consecutive term.

—Mr. P. A. Samuelson of Mahtomedi, Minn., has been elected superintendent of schools at Hancock.

—Memorial exercises in honor of the late James C. Byrnes, for more than a quarter of a century a member of the board of examiners of New York City, were held on May 27th in one of the school auditoriums. The purpose of the memorial exercises was not only to pay a well-deserved tribute to the professional career of Mr. Byrnes, but to honor those ideals of public service of which he was so splendid an exponent.

—Mr. Walter E. Morgan has been appointed assistant state superintendent of public instruction for California, in place of Mr. A. R. Heron.

—Dr. David Eugene Smith, of Teachers College, has retired from active service after the completion of 25 years of work. Dr. Smith has been given the title of emeritus professor and will retain the use of his present office.

—Dr. J. B. Sears has been appointed director of the survey commission to make a survey of the physical properties of the Berkeley, Calif., school system. He had previously served as a consultant on curriculum revision for the Oakland schools.

—Dr. W. R. Straughn has been appointed to the state council of education of Pennsylvania. Dr. Straughn is principal of the Mansfield Normal School and was formerly superintendent of schools at Du Bois.

—Mr. N. J. Quickstad of Evansville, Ind., has been elected superintendent of schools at Mt. Iron.

—Dr. Frank B. Gilbert retires from the position of deputy state commissioner of education of New York. He has been in the service since 1892, and was appointed to his present post in 1919 succeeding Dr. Thomas E. Finnegan who resigned to become state superintendent of schools in Pennsylvania.

—The new natatorium-gymnasium at Aberdeen, Washington, has been named the George B. Miller Gymnasium, in honor of the local superintendent of schools.

—A. A. Slade has been reappointed superintendent of the Casper, Wyoming, schools for another three years. The Tribune of Casper says: "In Mr. Slade we have a comparatively young man of fine character, sincere interest in city and state, educationally qualified for the position he holds. In addition, we consider Mr. Slade to be an astute business man, possessing most necessary executive ability."

—Miss L. Pearle Hibarger of Yakima, Washington, has announced her candidacy for the county superintendency. Miss Mae Mark, the present incumbent, is barred from reelection by the two term limitation.

—Iowa. The following superintendents have been reelected: Anamosa—Frank W. Jones; Bagley—R. Arno Peet; Burlington—W. G. Brooks, 3 years; Cascade—R. J. Finn; Cedar—Omer C. Robinson, increase; Cedar Rapids, Arthur Deamer, increase; Columbus Junction—W. G. Robertson, increase; Corning—W. H. Durkee; Council Bluffs—Theodore Saam, 3 years, increase; Forest City—C. M. Ross; Hartley—John W. Fulton; Huron Cons. (P. O. Oakville)

—Mrs. Cornelia C. Hodges; Independence—T. R. Roberts; Inwood—Thomas Edwards, increase; Knoxville—A. J. Steffey, 2 years, increase; Le Mars—Charles A. Kittrell; Littleport—Lee R. Trezona; Marengo—J. H. Shipton; New Hampton—P. C. Lapham, increase; New Sharon—Newton J. Hibbs; Norwalk—E. C. R. Jordan, \$100 increase; Perry—Agnes E. Heightshoe, 3 years; Renwick—E. A. Ralston; Rock Rapids—

BANE OF SPECIALIZATION

Specialization has done great things for mankind, and is therefore a good thing, but it is perhaps too much of a good thing when it results in a paradoxical state of affairs where an educational institution is a congress of human beings who are disassociated so far as its purposes are concerned and associated only in the things which lie outside its purpose.—Dr. George Norlin, President, University of Colorado.

Lee J. Gillis; Ruthven—Bruce N. Eshelman, increase; Sibley—F. H. Gilliland, increase; Sigourney—W. Dean McKee, increase; Spencer—J. R. McAnelly; Tama—Karl Hanson; Toledo—W. H. Hoyman; Traer—S. W. Christian, increase; Waukon—B. K. Orr; What Cheer—J. Dale Welsch. Changes: Cherokee—N. D. McCombs; Dubuque—Chas. E. Prall; Dunkerton—J. L. Larson; Newell—I. E. Missman.

—Supt. J. J. Rae of Caldwell, Ida., has been elected president of the Inland Empire Educational Association for the year 1927. Mr. Rae succeeds Dr. Sheldon of the University of Oregon.

—Arnold Bennett Hall, professor of political science at the University of Wisconsin, was elected on April 16th as president of the University of Oregon, following a meeting of the board of regents. Dr. Hall is regarded as one of the strong men on the Wisconsin faculty and his work in political science has been widely recognized.

Dr. Hall is a graduate of Franklin College. He received the degree of doctor of jurisprudence from the University of Chicago in 1907, and later completed special graduate work at the same institution. He was admitted to the bar in 1907. From 1909 to 1921, Dr. Hall was on the faculty of Northwestern University, and in 1921 went to the University of Wisconsin as professor of political science.

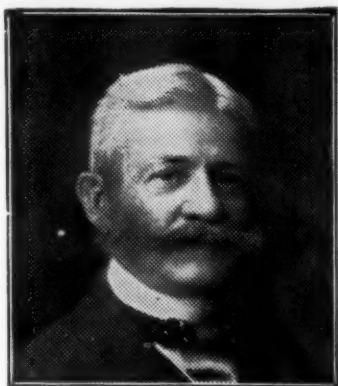
—Mr. H. O. Lokensgard has been reelected superintendent of schools at Dawson, Minn.

—Supt. R. M. Fjelstad of Cottonwood, Minn., has been reelected with an increase in salary.

—Mr. N. E. Schwartz, formerly superintendent of schools at Sandstone, Minn., and recently representative of the Silver Burdett Company, has accepted a position with the John C. Winston Company, to cover Cook County and the city of Chicago. Mr. John A. Shoemaker, formerly with the Thomas Charles Co., succeeds Mr. Schwartz as representative of the Silver Burdett Company.

—Mr. E. K. Barden has been reelected as superintendent of schools at Humble, Tex. Mr. Barden has completed his first year of service, coming from Livingston to Humble last summer.

(Continued on Page 97)



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(Continued from Page 94)

—Mr. O. E. Loomis has been reelected principal of the Boone-McHenry Township High School, Capron, Ill., for a third term. The school is a member of the North Central Association of Colleges and Secondary Schools.

—Supt. W. S. Dimmett of Rock Falls, Ill., has been reelected with an increase in salary.

—Mr. Leroy Hansen has been employed as director of research and curriculum in the public schools of Rock Falls, Ill.

—Supt. James C. Bay of Easton, Pa., has been reelected for another four-year term, at a salary of \$6,000 per year.

—Prof. V. A. C. Henmon, director of the University of Wisconsin School of Education, has resigned to accept a professorship at Yale University. Prof. Henmon is succeeded by Prof. W. L. Uhl, a member of the faculty.

—Mr. William H. Weiss of Chester, Pa., has been elected superintendent of schools at Bethlehem, at a salary of \$8,000 a year, succeeding James N. Muir.

—Miss Grace A. Day has been appointed acting superintendent of elementary schools of Meriden, Conn., and Mr. Paul S. Miller of the high school and junior high schools for the remainder of the school year.

—Mr. Frank J. Arnold, principal of Public School 118, Brooklyn, has been elected a district superintendent of schools, succeeding C. D. Fleming.

—Mr. George A. Grim of Nazareth, Pa., has been reelected county superintendent of schools of Northampton County, Pa., at a salary of \$4,500, or an increase of \$500.

—Supt. J. P. Treat of Manitou, Colo., has announced his retirement, to take effect at the close of the school year.

—Supt. Lyman C. Hunt of Burlington, Vt., has been reelected for another year.

—Mr. C. C. Thompson of Stratford, Conn., has been elected superintendent of schools at Meriden, to succeed David Gibbs.

—Supt. J. F. Sharp of Stevensville, Mont., will retire at the end of the school year after 31 years of service in the schools. He was appointed superintendent in 1895 when there were three teachers and 75 pupils.

—Supt. J. H. Stiner of Quincy, Ill., has been advanced to \$5,100 a year, or an increase of \$100.

—Supt. C. E. Chrane of Boonville, Mo., has been reelected for his fourteenth term.

—Supt. James W. Stitt of Princeton, Ind., has been reelected for another three-year term.

—Supt. W. B. Smith of Clarkston, Wash., has been reelected at a salary of \$3,500 per year.

—Mr. William S. Steere has been appointed assistant superintendent of elementary schools at Providence, R. I.

—Supt. Gilbert Woods of Prescott, Wash., has been reelected for a two-year term.

—Mr. G. A. Walter has been elected superintendent of schools at Palouse, Wash.

—Mr. C. E. Evans of Monett, Mo., has been reelected for another year.

—Supt. R. C. Nichols of Auxvasse, Mo., has been reelected for another year.

—Mr. L. B. Hawthorne has been reelected superintendent of schools at Mexico, Mo., for his fifteenth consecutive year.

—Supt. J. P. Akridge of Conway, Ark., has been elected head of the school system at Beebe.

—Supt. J. C. Bay of Easton, Pa., has been reelected at an annual salary of \$6,000.

—Supt. James F. Butterworth has been reelected head of the schools at Bradford, Pa.

—Supt. C. W. Lillibridge of Smethport, Pa., has been reelected for another four-year term.

—Supt. E. P. Corbit has been reelected for a fourth term as head of the schools at Penn Yan, N. Y.

Architecture is like language; it is a matter of development and tradition. New words are coined to meet new needs and to express new ideas. These words may be inadequate or misunderstood in the earliest phases of their use. It is just so with architecture; new forms may be devised, they cannot always be found in the earliest stages of such a development as we are going through, but I have the greatest confidence that they will be found and that solutions which will be presented will remain as examples of intelligent adaptation to conditions and that the result will have a beauty of its own.

—Cass Gilbert.

—Supt. D. E. Schnebly of St. John, Ariz., has been reelected for the next year.

—Supt. M. L. Brown of Corry, Pa., has been reelected to succeed A. E. Hemstreet.

—C. C. Green of the Clarion, Pa., normal school, has been elected superintendent of schools at New Castle.

—Supt. C. E. Wilson of Johnsonburg, Pa., has been reelected for another term of four years.

—George R. Ray, of Beaver Dam, Wis., has been elected superintendent of schools at Arlington.

—Mr. M. J. Carlton has been appointed superintendent of the grade school system at Benton, Ill.

—Supt. C. A. Krout of Tiffin, O., has been elected for a three-year term, after completing a service of 26 years in the schools.

—Supt. L. E. Bear of Mineral Point, Wis., has been reelected for a two-year term.

—Supt. C. W. Conrad, of Marion, Ill., has been reelected at an increase in salary.

—Supt. W. A. Walls of Kent, O., has been reelected for a four-year term, beginning with July. Mr. Walls has been granted an increase in salary, based on a sliding scale reaching up to \$4,500. He has served the city schools for fourteen years, five years of which were given to the superintendency. He was superintendent of schools at Martins Ferry in 1915, leaving to enter service overseas during the world war. Returning from his war service, he was again elected as superintendent and has completed six years of service since 1920.

—The board of education of Meriden, Conn., has chosen C. C. Thompson of Stratford as its superintendent of schools at a salary of \$5,000. The Meriden Record says: "We hope that the school board will use the same good sense in supporting him that it did in selecting him."

—William S. Steve was appointed assistant superintendent of schools by the Providence, R. I., school committee.

—Supt. Frank G. Pickell of Montclair, N. J., has been reelected for a three-year term, at a substantial increase in salary for each of the three years covered by the contract.

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fully; the junior high schools have been developed to a high degree of efficiency, and a bureau of reference and research has been established which has functioned for the development of greater efficiency throughout the system.

—Mr. A. C. Watson has been elected superintendent of schools at Toledo, Ill., to succeed C. E. Mitchell.

—Mr. F. R. Phillips has been elected superintendent of schools at Alma, Mich., to succeed A. C. Luchtman.

—Supt. R. A. Buell of Watertown, Wis., has been reelected for another year.

—Mr. F. E. Beck of Olympia, Wash., has been elected superintendent of schools at Burlington.

—Mr. R. F. Rose of Bixby, Okla., has been elected superintendent of schools at Weleetka.

—Supt. R. C. Nichols of Auxvasse, Mo., has been reelected for another year.

—Supt. Edward Beatty of Warrensburg, Mo., has been reelected for another year.

—Mr. O. L. Davis of Keytesville, Mo., has been elected superintendent of schools at Higginsville.

—Supt. George D. Dieterich of Carrollton, Mo., has been reelected for another term.

—Supt. J. O. Henderson of California, Mo., has been reelected.

—Mr. J. D. Bramlette of Stephenville, Tex., has been elected superintendent of schools at McAllen.

—Mr. Robert Shepherd has been elected superintendent of schools at Cedar Rapids, Neb.

—Supt. J. E. Hulet of Astoria, Ill., has been reelected for another year.

—Mr. H. R. Vanderslice, for nine years superintendent of schools at Coatesville, Pa., has been elected head of the Woodlawn schools at a salary of \$7,500.

—Mr. L. C. Keefauver of Adams County, Pa., succeeds Walter D. Reynolds as supervising principal at Gettysburg.

—Mr. Charles S. Hottenstein has resigned as superintendent of schools of Conshohocken, Pa., to accept a position with the Iroquois Publishing Company at Syracuse, N. Y.

—President Peter A. Cavicchia of the Newark, N. J. board of education has suggested that Superintendent David B. Corson be retired and made superintendent-emeritus. Dr. Corson has

served the Newark school system for thirty years. He is 62 years of age and in the full vigor of service, and the majority of the board members do not want him to retire.

—One of the new high schools erected at Cairo, Ill., will be known as the Clendenen, named after Superintendent Taylor C. Clendenen who has been identified with the Cairo schools for forty years. Mr. Clendenen will retire with the present school year and receive the title of superintendent-emeritus with a nominal salary.

—J. F. Waddell, of Antigo, Wis., was elected superintendent of schools to succeed H. R. Edwards at South Milwaukee, Wis., for a term of three years at a salary of \$4,400. Mr. Waddell was superintendent at Evansville, Wis., and later at Antigo where he served for four years.

—When the school board at Casper, Wyoming, failed to reappoint S. R. Bumann, as principal of the high school, a controversy arose. After calm was restored and the facts brought to the surface, the Casper Tribune stated: "The key to the whole situation lies in the fact that in any organization, whether private or public, authority must be definitely centered; first in a board of directors, next in one executive to carry out the board's policy. In the case of a high school a principal cannot go counter to the orders of the superintendent nor usurp the latter's authority without impairing the efficiency and morale of the institution. The evidence showed Mr. Bumann to be guilty on these counts; consequently he was not reelected, which action surely was within the province of the school board."

—After serving as superintendent of the Glens Falls, N. Y., schools for 27 years, Elbert W. Griffith has announced his retirement which is to go into effect July 1, 1927. His record is regarded as a remarkable one.

—H. J. Kaake of Mancelona, Mich., has been elected superintendent of schools at Harbor Springs.

—Supt. J. C. Lucas of Sullivan, Ill., has been reelected for another year.

—Mr. F. R. Phillips of Croswell, Mich., has been elected superintendent of schools at Alma.

—Supt. W. B. Smith of Clarkston, Wash., has been reelected at a salary of \$3,500 per year.

—Mr. Clyde C. Green of Clarion, Pa., has been elected superintendent of schools at New Castle, Pa.

—Mr. J. H. Payne of Richmond, Ky., has been elected superintendent of schools at Maysville.

—Mr. R. B. Patin has been elected superintendent of schools at Shaker Heights, O., for the coming year.

—Mr. C. C. Thompson of Stratford, Conn., has been elected superintendent of schools at Meriden, succeeding David Gibbs.

—Mr. B. R. Bowden of Gilman, Ill., has been elected superintendent of schools at Morris.

—Supt. H. Ambrose Perrin of Joliet, Ill., has been given a substantial increase in salary for the next year.

—Supt. T. C. Clendenen of Cairo, Ill., has been made superintendent-emeritus by the board of education.

—Supt. E. O. Bickel of Mifflingburg, Pa., has been reelected superintendent of the Union County schools.

—Mr. C. T. Prose has been elected superintendent of schools at Zanesville, O., succeeding F. C. Kirkendall.

—Mr. R. M. Muir of Hamilton, Minn., has been elected superintendent of schools at Fordville.

—Mr. C. E. Beck of Thorntown, Ind., has been elected superintendent of schools at Columbia City, to succeed O. W. Craig who goes to Bluffton.

—Mr. A. F. Throckmorton of Little River, Kans., has been elected superintendent of schools at Valley City.

—Supt. John C. Stiers of Washington, Pa., has been reelected head of the schools for a term of four years.

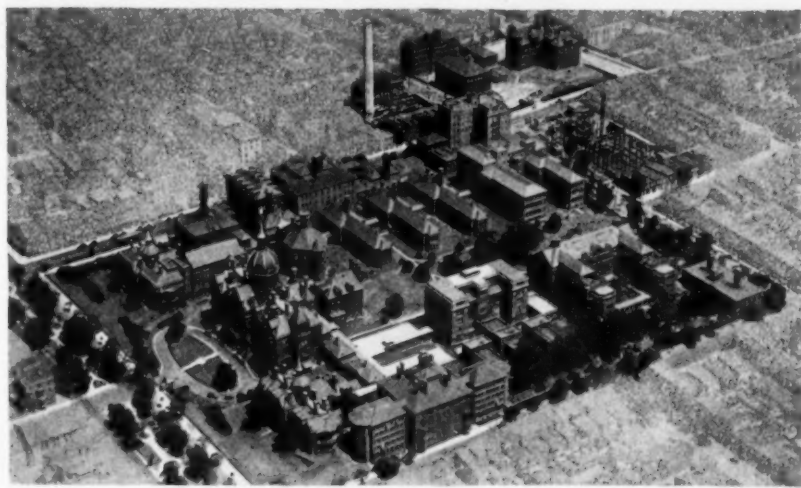
—Mr. Norman W. Cameron of Pottstown, Pa., has been elected superintendent of schools at Chester.

—M. L. Brown of Corry, Pa., has been elected superintendent of schools at Meadville.

—Mr. F. L. Eversull of St. Louis, Mo., has been elected superintendent of schools at Bartlesville, Okla.

—Mr. A. L. Shay has been elected acting superintendent of schools at Lansford, Pa., succeeding W. K. Groff.

FLOORING



Air view of Johns Hopkins Hospital, Baltimore

To this famous institution is being added a new unit.

JOSEPH EVANS SPERRY is the Architect; M. A. LONG CO., Builders

DURAFLEX-A FLOORING has been chosen for the entire new unit of Johns Hopkins Hospital—100,000 square feet. Duraflex-A was selected after four years of severe tests and rigid comparisons of its advantages over other materials. The solid, seamless, rubbery surface of Duraflex-A will also be your choice if you test it! Duraflex-A is used extensively by leading architects in office buildings, schools, and hospitals.

Write your name and address on the bottom margin—tear on the dotted line and mail to us for COMPLETE INFORMATION.

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EDUCATIONAL ENGINEER AND CONSULTANT
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Formerly State Supervisor of Secondary Education,
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Pertaining to Central Plants, Heating and Ventilation,
Illumination and Sanitation. Plans when desired.
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Specializing in School and College
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Specialist in the design and development of
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SCHOOL FINANCING
For the past fifteen years we have specialized
in the purchase of School Bonds.
We furnish blank bonds, prepare proceedings and attend to all
legal details relating to proposed bond issues.
If you contemplate New School Financing
Write us Today
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Specializing in the development of school grounds in the
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Heating, Ventilating Plumbing and Lighting for Schools.
Professional Service for Architects.
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Established 1898
JOHN NUVEEN & CO.
Municipal, County & School Bonds
We have assisted in the financing of schools in every part
of the country during the last 27 years. Information and
advice gladly furnished without obligation.
First National Bank Bldg. CHICAGO

PERSONAL NEWS OF SCHOOL OFFICIALS

—The committee of award of the Julius and Rosa Sachs prize of Teachers College, Columbia University, has announced as the prize winner for 1926, Dr. Edward A. Fitzpatrick, dean of the graduate school and professor of education at Marquette University, Milwaukee, Wis. The subject of the essay for the competition was "The Promotion of Scholarship in the Teachers of the Secondary Schools of the United States."

The prize is awarded from a fund of \$20,000, which was made as a gift by Prof. and Mrs. Sachs on their golden anniversary and turned over to the College for promoting prize essays on secondary education in the United States. Dr. Sachs was formerly professor of education at Teachers College and at present holds the rank of emeritus-professor in the same institution.

A SCHOOL BUDGET DIRECTOR

The state of Iowa is engaged in a departure in school finance that is promising of gratifying results. The state budget department has created the position of extension educational and survey director of schools. The service contemplates aiding the school districts of the state to formulate efficient internal detailed budgets, which will better enable them to make more exact reports of funds needed, as appear on the consolidated report of tax levy, now required to be filed annually with the budget department through the auditors of the various counties.

More than this, the detailed budget will assist the schools to keep a better check on expenditures and will do a great deal in working toward much economy in the administration of school district funds by necessitating an actual yearly working plan. In addition to assisting the schools in working out this plan all the data possible will be gathered and new ideas accepted when found feasible.

The man chosen for this important task is Emmet L. Morris, until recently superintendent of Marquette, Iowa, schools. He is a graduate of the high school at Calmar, Iowa, attended the Washington University at Seattle, and also attended the Upper Iowa University where he received his Bachelor of Arts degree. He served as superintendent of schools in village schools for five years, two at Castalia, one at Mitchell, and two at Marquette.

Mr. Morris' record as a school administrator gives assurance of a thorough grasp of his office. His familiarity with school accounting and the needs of a modern school system, both urban and rural, will enable him to bring greater order and system into the financial phases of school administration.

DEAN REBER RESIGNS

—Louis E. Reber, dean of the University Extension division of the University of Wisconsin, having attained the age of 68, has announced his retirement.



EMMET L. MORRIS,
Survey and Budget Director,
Marquette, Iowa.

Coming to Wisconsin in 1907 from Pennsylvania State College, in which he was dean of the engineering school, Dean Reber assumed charge of an extension division which consisted of three men working in two rooms.

The first organized extension instruction in the United States was in 1892 at the University of Wisconsin and the University of Chicago. It was not until 1906, however, that the work was systematically begun and Dean Reber assumed the position of director. In 1907 the legislature accepted extension as a feature of the state educational program and appropriated \$20,000 for the biennium.

The first student was enrolled in November, 1906, and within two years, more than 1,000 men had enrolled. Soon 200 separate correspondence courses were given in 35 departments of the University and the instructors became resident teachers. Today the correspondence study enrollment has passed the 100,000 mark. The study has grown to such proportions that a separate study faculty and textbooks have been provided. The work has been extended to provide evening classes, which have developed to such a point that the work has come to be performed under the vocational education law of 1913. Today in Milwaukee there are 100 evening classes, and in other cities there are fifty others.

NEWS OF SCHOOL OFFICIALS

—At the last annual election at Humble, Tex., Mr. H. D. McDonald was elected a member of the school board. Mr. McDonald was elected to the position of secretary.

—Rev. W. E. Krebs has been reelected president of the board of education at Rock Falls, Ill. Mr. C. C. Kadel has been reelected as member for another three-year term, and Mr. Carl C. Mott was elected to serve his first term.

—Mr. Harry L. Meyer has been elected secretary of the school board at Alton, Ill.

—Mrs. Ida C. Stacy, a member of the board of education at Tiffin, O., has resigned. Mrs. Stacy is succeeded by Mrs. Frances McKinney.

—Mrs. B. R. Lewis, retiring president of the board of education at Rhinelander, Wis., was

(Concluded on Page 102)



Standardized Greenhouses Used On New Minneapolis Schools

ONE type and size greenhouse has been used. Each is 25 feet wide and 50 long. This gives ample room for three walks and four plant growing benches, or botanizing tables.

The greenhouse framework is of steel. All wood is of highest quality, sap-free greenhouse cypress. The ventilation is under complete control, being assured by two rows of sash which open at the ridge, and a row on each side of the house.

Our special greenhouse paint is used inside and out. This consists of three coats, each coat being a different mixture.

Further facts and figures we would be glad to send you. Our Service Department is always at your disposal.

Lord & Burnham Co.

BUILDERS OF GREENHOUSES AND CONSERVATORIES

Eastern Factory
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BUFFALO
Jackson Bldg.

Western Factory
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PHILADELPHIA
Land Title Bldg.

MONTREAL
124 Stanley St.

CHICAGO
Cont. Bank Bldg.
KANSAS CITY
Commerce Bldg.

ST. CATHARINES
Ontario, Canada

Canadian Factory
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The Scientifically Correct Shading for Schools

Center Installation of Luxor Window Shades

NOTE in the illustrations above the unusual flexibility of adjustment made possible by "Center Installation."

Perfect control of light and ventilation is possible at all hours of the day. By drawing down the *Luxor* shades during the sunny hours of the day the glaring sunlight is replaced by a soft, diffused glow that is ideal for close study. As the sunlight changes, either or both shades may be rolled up, as desired, to permit the free entrance of light.

Plenty of fresh air may circulate freely through windows open at both top and bottom without shades being flapped about in the breeze. For simplicity, economy and all round efficiency, "Center Installation" of *Luxor* window shades mounted on *Standard* shade rollers is by far the most practical and sanitary method of shading school room windows that has ever been devised.

It has many advantages over the obsolete adjuster installations—simple to install and operate—will not get out of order—less expensive and less disfiguring because of no unnecessary hardware or cords.

And no other shade cloth will give the years of service that *Luxor* unfilled tinted cambric mounted on *Standard* shade rollers will give.

Every school superintendent or school board member should read our "Treatise on Window Shadings for Schools." Write for your copy. It will be furnished to you free of charge by return mail.



Atlanta
Buffalo

THE WESTERN SHADE CLOTH CO.

CHICAGO
St. Louis

Detroit
Indianapolis

(Concluded from Page 100)

given a reception by the teachers of the city schools in appreciation of the service she has rendered to the school system. Mrs. Lewis was presented with a basket of flowers by the teaching staff.

—At a meeting of the board of education of Rhinelander, Wis., held on May 3rd, Mr. J. L. Hildebrand was elected president, to succeed Mrs. B. R. Lewis. Mr. W. D. Juday was elected vice-president, and Mrs. Edward Swedburg, a new member, was inducted into office.

—Dr. Chester R. Stacy, of Webster, Mass., has been elected president of the Conference of Superintendents of the Schools of Massachusetts.

—Guy C. Goodhart, 52, president of the school board at Lafayette, Ind., was fatally injured when an auto in which he was riding was struck by a passenger train.

—Mrs. Emily Wooster Mohr, secretary of the school board of Stratford, Conn., for five years, has resigned. Mrs. Harry Osterlund was elected to succeed her.

—John W. Schoeffler, president of the board of education at Alton, Ill., died on May 4th, in a St. Louis hospital, following injuries received in an automobile accident. Mr. Schoeffler had been a member of the board for sixteen years, and had filled the office of president for the last fourteen years.

—Mr. Charles Luett has been appointed secretary of the board of education at Monticello, Ia.

—Mr. O. A. Zollinger has been elected president of the board of education at St. Joseph, Mo.

—Dr. John Vanderlaan, president of the board of education at Muskegon, Mich., will be a candidate for reelection to the board of education. Dr. Vanderlaan has completed 33 years of service as a member of the board, the last eleven of which he filled as president of that body.

Dr. Vanderlaan, who is nearly 70, was born in the Netherlands and came to the United States in 1873. He was a student of Hope College and was graduated from the college of medicine of the University of Michigan. He was elected to the board of education in July, 1893, and has been a member ever since. In

1915 he was chosen president, in which capacity he has served for the last eleven years.

—Mr. Jesse E. Reese has refused reelection to the office of treasurer of the school district of Pana, Ill., after completing a service of 34 years. Mr. Frank A. Cutler has been elected as his successor.

—Mr. Hiram A. Clevenstine, a member of the board of education at Rock Island, Ill., died at his home in that city on April 11th, after a long period of ill health. Mr. Clevenstine was 55 years old and had been a member of the board for the last eight years. The funeral service took place in the local Presbyterian church, with Masonic service at the cemetery.

—Dr. James D. Sullivan has resigned as director of the Compulsory Attendance Division of the New York State Department of Education. He taught as a teacher and principal for nine years and in November, 1890, was elected school commissioner in Livingston County; previous to his resignation he was appointed inspector in the state department and had been a member of the force continuously up to date.

Since 1904 Dr. Sullivan had been director of the attendance division and is a recognized authority on compulsory education, school census, child labor, illiteracy and related subjects. In 1913 he originated and carried into successful operation permanent functioning census bureaus for the entire state, the first of its kind to be put in operation in any city.

—Dr. Garry Cleveland Myers in the junior teachers' college of the Cleveland School of Education, is on a leave of absence. Dr. Myers is giving two courses in home education and parenthood at the School of Applied Social Science, of Western Reserve University. Each course offers two semester hours of credit and meets in two sections. The course on the preschool child is now in its third semester and has a total registration of 179 students.

—Mr. A. M. Limmer of Palmer, Tex., has been elected superintendent of schools at Desdemona, for the next biennium, at a salary of \$2,500 per year.

—When it was discovered that the board of education of Uniontown, Pa., elected J. H. Alleman, assistant superintendent instead of super-

intendent, the high school students staged a protest parade. Mr. Alleman opposed the protest and promised to work in harmony with Dr. Proctor, the new superintendent.

—Mr. Calvin O. Moore of Erie, Pa., has been appointed assistant district superintendent of schools for the term beginning with July, 1926, and ending with July, 1930.

—Supt. George R. Staley of Rome, N. Y., celebrated the 25th anniversary of his service in the city schools with a dinner given in his honor by the teachers of the school system. Supt. D. J. Kelly of Binghamton, formerly superintendent at Rome, was the principal speaker. Mr. Staley was presented with a fine gold watch as a gift from the teaching staff.

—Mr. John W. Cummins, principal of the high school at Greensburg, Pa., died on April 2nd, at his home in that city.

—Mr. Edward D. Roberts, assistant superintendent of schools at Cincinnati, O., has been elected superintendent of schools at San Diego, Calif.

Mr. Roberts is a graduate of the University of Cincinnati and holds a degree from Teachers College, Columbia University. He has been assistant superintendent in Cincinnati since 1911, and an instructor in the College of Education in the University of Cincinnati. He has also been active as a member of the summer school faculty of Ohio State University.

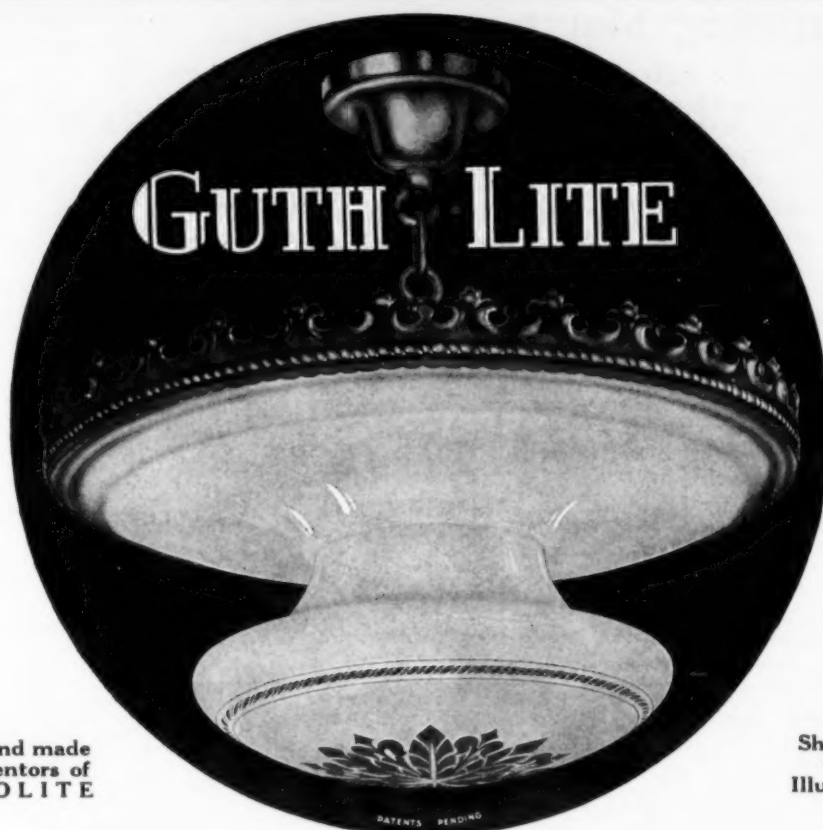
—Miss N. S. Simpson has been elected supervisor of schools at Beverly, N. J., to succeed Mr. James B. Dilks.

SCHOOLHOUSE DEDICATIONS

—The new Morton M. McCarver school at Tacoma, Washington, was opened by Prof. Edmund S. Meany of the University of Washington. Mrs. Rhoda B. Miller, president of the board of education was one of the speakers.

—The new school at Reliance, Wyoming, was formally opened by E. M. Thompson, superintendent of Rock Springs. Short talks were made by G. S. Davis of Dines, Thomas Foster of Megeath, and Floyd Roberts of Reliance.

—The West Denver, Colorado, high school was opened with impressive ceremonies. Principal H. V. Kepner presided. Addresses were made by Superintendent Jesse H. Newlon and C. M. Schenck, treasurer of the board of education.



Designed and made
by the inventors of
BRASCOLITE

Shadowless
Ceiling
Illumination

A New and Better Illuminator for Classrooms

Controls and Directs Light!

The priceless gift of sight is a treasure to be guarded through the classroom years. The light your pupils work by during hours of study must afford full *seeing power* without eyestrain.

GuthLite is a wonderful new illuminator which provides a glareless flood of softly *diffused*, shadowless light of maximum, uniform intensity on the working plane—with low brightness at the source.

It actually *controls* and *directs* light. By regulating the adjustable reflector up or down, the direction of light is controlled vertically or horizontally.

A portion of the globe extends above the reflector, providing shadowless ceiling illumination, increased or diminished according to the position of the reflector.

Super-illumination is here combined with striking beauty in design. Canopy, hanger and ornamental band are finished in Antique Bronze. Reflector is white porcelain enamel with Ivory band.

Made in plain as well as ornamental styles. Surprisingly low prices. Easily and quickly installed. Additional chain can be added if desired. The globe is quickly applied or released for cleaning, which requires but a minute.

Guth engineers have specialized in school and college lighting for years. They will be glad to consult with you or your architect, without obligation. Write for GuthLite folder illustrating the various styles.

Prices and Sizes:

Watts	Skt.	Dia. Ref.	Glass Size	Plain Ref. Plain Glass		Plain Ref. Dec. Glass		Orn. Band Dec. Glass		Orn. Band Plain Glass	
				No.	Price	No.	Price	No.	Price	No.	Price
75 to 150	Med.	12½"	8⅝" x 4"	B2820...	\$ 5.90	B2823...	\$ 6.45	B2826...	\$ 8.10	B2829...	\$ 7.55
200	Med.	17"	11⅝" x 5"	B2821...	8.35	B2824...	8.90	B2827...	11.10	B2830...	10.55
300 to 500	Mog.	21"	14⅝" x 6"	B2822...	11.65	B2825...	12.80	B2828...	15.55	B2831...	14.45

Brascolite



The EDWIN F. GUTH COMPANY

DESIGNERS - ENGINEERS - MANUFACTURERS

Lighting Equipment
St. Louis, U.S.A.

Aglite



M O R E L I G H T W H E R E M O S T N E E D E D

School Building Maintenance

Part IV Accounting

(Continued from Page 54)

basis of costs can be ascertained. The trucking of building material is almost absolutely necessary, because in most instances the promptness of service required of local merchants is not possible. In some cities where the janitorial force stay at the buildings the entire year this is possible, but even then men are often sent to a job and arrive ahead of the material. And then, when it is necessary to truck the men and their tools, it often happens that the material can be delivered at the same time, either from stock or from local merchants.

Note on the time card that in case no number has been assigned to the job to place an "x" in the place of the number and to describe it on the back of the card. Occasionally a verbal order is given for considerable work and the order does not come out until later that day—too late for entry. Or sometimes there is a question whether or not the charge is correct. In a large school system where the foremen are not working foremen, they may make out the time on a sheet, representing their entire department and the men merely notify their respective foremen of the time spent on various jobs. It has always been my rule that time cards should be made out on the men's time, i.e., outside of regular working hours. The time for each day should be made out either that day at the close of work or the first thing in the morning before work, and should be turned into the office immediately. This gives the office a chance to keep up with posting of time. The superintendent of buildings should watch the time cards, it being well to have them routed over his desk after posting, so that he may note unusual charges, etc. The high school print shop can make these. Note that the completed jobs are dropped down so as to give the office space for the extension of amounts. The labor charges are entered directly from the time card to the Job Record card.

The Requisition for Material

For most school maintenance jobs there is immediate need for material. It should be made as easy as possible for men to get material. The requisition (Form E) should show just what is wanted, when, and for what job. In small school systems it is better to have the requisition made out by the foreman. If a storehouse or stock room of materials is operated, whatever is needed is delivered directly to the men and if an article is not in stock it is up to the stock keeper to get it. The writer has worked out an arrangement whereby local mer-

TOPEKA PUBLIC SCHOOLS

Date: _____ 1925 _____ SCHOOL _____

We are in need of and request the following:

☐ Work ☐ New Equipment ☐ Replacement of Equipment

☐ Supplies not regularly listed ☐ Janitor's Supplies

(Use a separate sheet for each classification, and if more than one item is listed, please number separately.)

Signed _____ Principal

Received _____ O. K. _____

Clerk _____ Supt. of Bldgs. _____ Supt. of Schools _____

Referred to _____
Resumed _____ Action as follows: _____

FORM H. REQUISITION SHEET.

chants were informed that any school repair men presenting a requisition properly signed could be supplied with standard material. The merchant made a note of the job number, which he was required to incorporate in his monthly statement to us. Material should always be priced at the time of receipt, i.e., the merchant prices the articles on the requisition which is then turned into the office and posted against the job.

The advantages of a storehouse in this connection will be discussed later.

Requisitions should be made in triplicate, one copy to be retained by the foreman as a protection and record, one for merchant, and one for office. The importance of getting the price of material immediately is simply this: If the office has to wait until the end of the month for the bills to come in and then must go back and check each article against the various jobs, it will not be very long before the posting will be hopelessly lost in the rear. And then, it is always difficult to get merchants to enter the job numbers, with the resulting problem of identifying the material with the jobs.

Credit Memorandum for Returned Materials

In case more material is drawn or purchased for a job than is required, a credit memorandum (Form F) should be made out. This memorandum is issued when material is returned to the stock room.

This form need be in duplicate only, one for the foreman and one for office. The form is

TOPEKA PUBLIC SCHOOLS
BUILDINGS & GROUNDS DEPARTMENT

JOB NO. 6241

JOB RECORD

ISSUED 4/15/25 COMPLETED 4/17/25 ACTUAL COST \$54.16

LABOR				MATERIAL				
DATE	HOURS	RATE	\$	C	P. O.	REQ.	C. M.	
4/15	1	.80	80			6202		
"	3	.60	180			6209		
"	2	.50	100					
"	5	.30	150			Delivered value		
"	5	.30	150			40 5 8.95		
"	5	.30	150				30.00	
4/16	1	.80	80					
"	1	.80	80					
4/17	1	.80	80					
LABOR TOTAL			14.00		MATERIAL TOTAL			41.16
GRAND TOTAL			54.16					

CARD _____

FORM G. THE JOB RECORD.

the same as a requisition, except that it is of a different color and is labeled "Credit Memorandum."

The Job Record Card

The entries on the Job Record card (Form G) are almost self-evident. On the "material" side, the initials P.O., stand for Purchase Order. This is entered in case something like a drinking fountain or playground apparatus, which cannot be purchased locally, is needed for a job. Sometimes, too, a number of requisitions may be combined in one purchase order. "Req." is requisition. C.M., is credit memorandum. On the "labor" side the letter "D" stands for the Sub-Dept. which has done the work. By use of this column it is possible to separate out the cost of any particular classification of work on any job. By keeping the time cards filed away in chronological order, it is possible to look back and find all details even to the names of the men who worked on this or that job.

The back of the card may be used for personal notes of the superintendent of buildings. It is handy to have these cards in a well fitted box or drawer so that they stand on end.

This drawer or box should have compartments so that the standing account cards may be separated from the others, etc. On the standing account cards the number of the standing account is written in the upper right hand corner (where the number 6241 is in the cut of Form G) and at the end of each month a total

(Continued on Page 107)

Topeka Public Schools
Buildings and Grounds Dept.

Name: Sam Keeton
Date: April 15, 1924

WRITE PLAINLY. WE ARE NOT MIND-READERS.

Job No.	Hours	Jobs Completed
6032	5	2.50
6031	2	1.00
6241	1 1/2	.75
	8 1/2	6241

If you have not a name, put an "X" in the place and describe on back column in right of this card.

FORM D. EACH MEASURES 4" BY 6".

Topeka Public Schools
Buildings and Grounds Dept.

Name: Sam Jones
Date: April 15, 1925

WRITE PLAINLY. WE ARE NOT MIND-READERS.

Job No.	Hours	Jobs Completed
6238	1/2	.30
6026	1	.60
6020	4	2.40
6241	3	1.80
	8 1/2	6238 1.00
		6241

If you have not a name, put an "X" in the place and describe on back column in right of this card.

TOPEKA PUBLIC SCHOOLS
BUILDINGS AND GROUNDS DEPARTMENT

REQUISITION NO. 6202 P. O. NO. _____ DATE April 15, 1925 JOB NO. 6241

QUANTITY	LAB. PT. NO.	DESCRIPTION	PRICE	EXTENSION
3		lamps #10 screws - 1 1/4"		
8		pts. 1/4 - 20' - 0" 48.		
TOTAL				

Signature of Foreman: Harry Coleman

FORMS E AND F. MEASURE 5 1/4" BY 8".



Outstanding features of
"Williams" Reversible
Window Equipment

Ideal Overhead Ventilation
Reversibility for Inside
Cleaning
Greater Light Area
More Weathertight Con-
struction
Better Shading Facilities
Simplified Frame Construc-
tion
Weightless Windows

Write for list of in-
stallations near you

"Williams" Reversible Window Fixtures

During the past twenty years hundreds of schools have been equipped with "Williams" Plank Frame Reversible Window Fixtures.

This widespread, and in many cases repeated use, surely must indicate satisfaction.

The building illustrated is one of 22 school installations in Akron, Ohio.

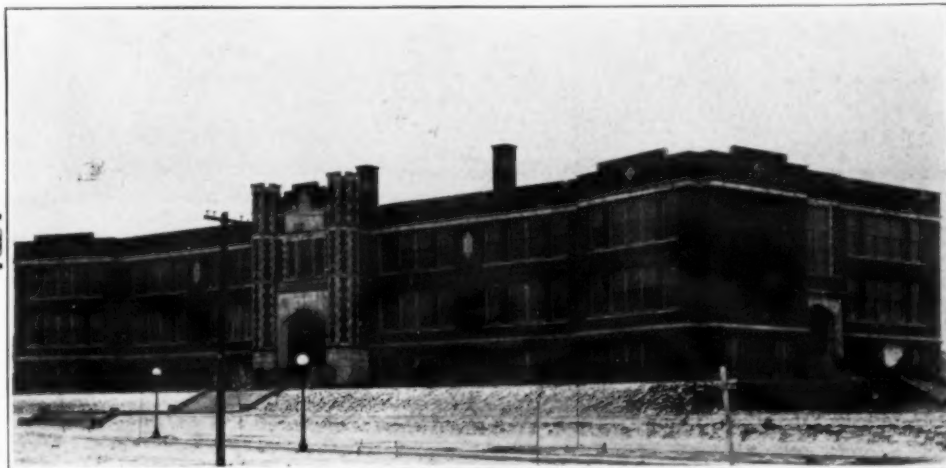
"Williams" equipment is installed only by our factory trained mechanics. This assures our clients of efficient workmanship and proper operation of equipment.

LET US SEND YOU FURTHER PARTICULARS.

THE WILLIAMS PIVOT SASH CO.

East 37th St. and Perkins Ave.,

Cleveland, Ohio.



FIRESTONE SCHOOL,
AKRON, OHIO

T. Ralph Ridley, Archt.
Akron, O.



With "Williams" Reversible
Window Fixtures cleaning
is done entirely from the
inside.

(Continued from Page 104)

is struck and then the totals are continued until the card is used up, then another card started. For these totals the notation "at the bottom card.....of....." is used so that at the end of the year all the cards may be completely numbered to prevent loss. A card is used because it is more durable under constant handling.

Completed B-orders may be removed from the card file after they have been reported to the school board. These cards work well in a visible card index system. If part of the work may have been by a contractor, notation can be made on these cards.

Supplementary Forms

The forms discussed so far may be called the basic group. There are in addition others which, while not exactly necessary to do business, serve to make things run a little smoother.

The first of these is the requests for work and purchases. In a fairly large school system it is very annoying and unbusinesslike to have requests come in on various sizes of paper and without definite form of communication. The superintendent of buildings is likely to be embarrassed, if for the lack of a definite policy, he

is besieged with requests from all sources. These requests should come through the principals and receive his O.K. in the form of his signature to the request. The supervisors should also have the authority to make requests direct. Even the above mentioned people represent quite a group. Form H is not exactly satisfactory. It should be addressed to one of the executives of the school system, and if that someone is not the correct party it should be forwarded. Preferably it should be directed to the superintendent of buildings. If, in his judgment, the request is unusual or seems to him beyond his constituted authority, he should refer it to the superintendent of schools. The point is, the requests should be made out on a uniform sized sheet and have a definite system of O.K'ing. They may be referred to the building committee or the school board as a whole.

It is considered good business to have school trucks run on written orders. This plan serves as a protection for the truck driver in the elimination of errors as to place, goods, charges, etc. The driver's pick-up ticket (Form I) illustrates a good form. Under the space "For truck driver only" there is room to have the driver make entries when certain special data is wanted, such as time and distance, etc., of runs. Some very unusual uses are occasionally made of pick-up tickets. Once a pick-up bearing the time of day and date of run, proved an alibi for a driver in the case of a motor accident, in which a truck looking much like a school truck was involved. Another time a pick-up order served to check up on the number of repaired clocks turned over to the schools by a local jeweler, because we could prove that the truck driver had called for them.

The truck pick-up ticket is invariably carried by the drivers in an aluminum holder and is turned in for filing by date after completion.

The truck operation report is a useful auxiliary form. The records are kept by the truck drivers and turned in once a month at which time the superintendent of buildings may check the total mileage. It is well to know what the trucks are costing the school department.

(To Be Continued)

Topeka Public Schools
Buildings & Grounds Department

Truck Operation Report

192

	Gas in gal.	Oil in qt.	Day's run	Total Mileage	Motor Hours	Motor Idle	Av. Daily Temp.	Gas Price	Oil Price	Mt. Per Gal.	Mt. Per Qt.
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
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16											
17											
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19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											

Summary for Month

Miles Per Gal. Miles Per Qt. Cost Per Mile

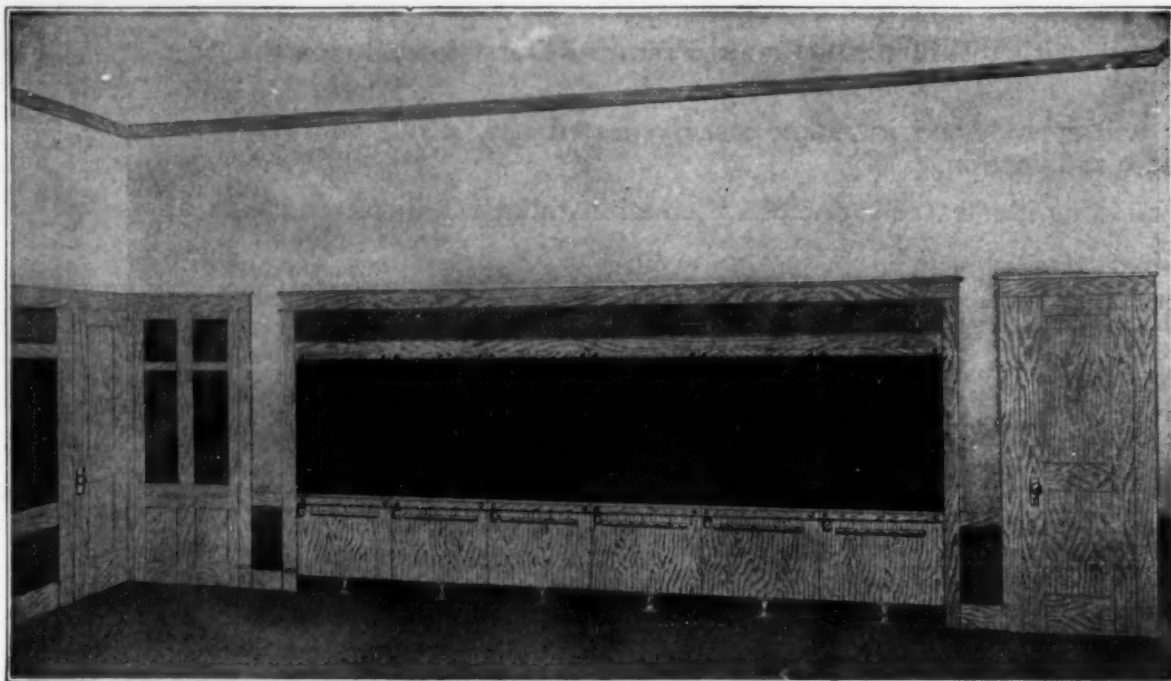
FORM J (FRONT)

(See Page 108 for Back of Form.)

TOPEKA PUBLIC SCHOOLS BUILDINGS AND GROUNDS DEPARTMENT	
From By <i>Storage</i>	To <i>Washington</i>
Date <i>April 16-1925</i>	Job No. <i>6241</i>
40 #6 desks - 45 rears select dark finish	
H. R. Ramsey	

FORM I.

OPEN IT IN A SECOND



MILLER SCHOOL WARDROBE

Above is an actual Photograph. There are many advantages in the Miller School Wardrobe; we mention the following:

Genuine Bangor Slate Blackboard **No Petty Pilfering**
Solid Bronze Hardware **Reduction of Heating Expense**
Perfect Ventilation and Sanitation **Nothing to Get Out of Order**
K-M SUPPLY CO. - 123 West 8th Street - KANSAS CITY, MISSOURI

**All Doors
Open In One
Operation, Or
Any Door May
Be Opened
Individually**

*For Complete
Information
Write for
Catalogue
W-5*

REPAIRS MADE

TIRES:

List here punctures and blowouts as they occur giving dates and causes.

Date	Punct. or Bl.	Cause

MOTOR REPAIRS:

List parts replaced or repaired and date.

Date	Parts	Remarks

CHASSIS AND BODY REPAIRS:

Date	Parts	Remarks

ACCIDENTS:

However trivial note below. Complete report made separately.

Date	Hour	Other Parties	Cause

For the past month the _____ Truck

No. _____ has given Excellent, Good, Fair, Poor service.

Inspected _____ Signed _____
Truck Driver

FORM J (BACK).

BUILDING NEWS OF THE SCHOOLS

—Rhineland, Wis. A junior high school building now under construction will be completed ready for use in September next.

—Barrington, R. I. A six-room addition has been built for the Leander Peck School. The addition is a gift made by Mrs. Leander R. Peck. An appropriation of \$40,000 has been made for an addition to the Maple Avenue School.

—New York, N. Y. The board of estimate has appropriated \$7,482,600 for the erection of the proposed Theodore Roosevelt high school in the Bronx, for six elementary schools, for additions to two other schools, for mechanical equipment, and for a lump sum of \$500,000 for awards for school sites already authorized.

Some of the items for which appropriations were made follow:

New public school, Brooklyn.....	\$ 290,000
New public school, Brooklyn.....	365,000
Roosevelt high school.....	2,646,000
New public school, Brooklyn.....	367,500
New public school, Queens.....	371,500
New public school, Queens.....	358,000
New public school, Queens.....	369,500

—Cottonwood, Minn., will hold a second election for the issuance of \$50,000 in bonds for a new school.

—The local contractors have questioned the right of the Bridgeport, Conn., board of education to award a contract to a firm which is headed by a man who is also a member of the board. The direct question asked is: "Will you please advise us whether our members will be expected to compete with any firms in which any member of the board may have a direct or indirect interest, when submitting proposals?"

—The school committee of Providence, R. I., has petitioned the local city council to erect a \$750,000 school building to consist of approximately 24 classrooms, four manual art rooms, two auditoriums, and two gymnasiums.

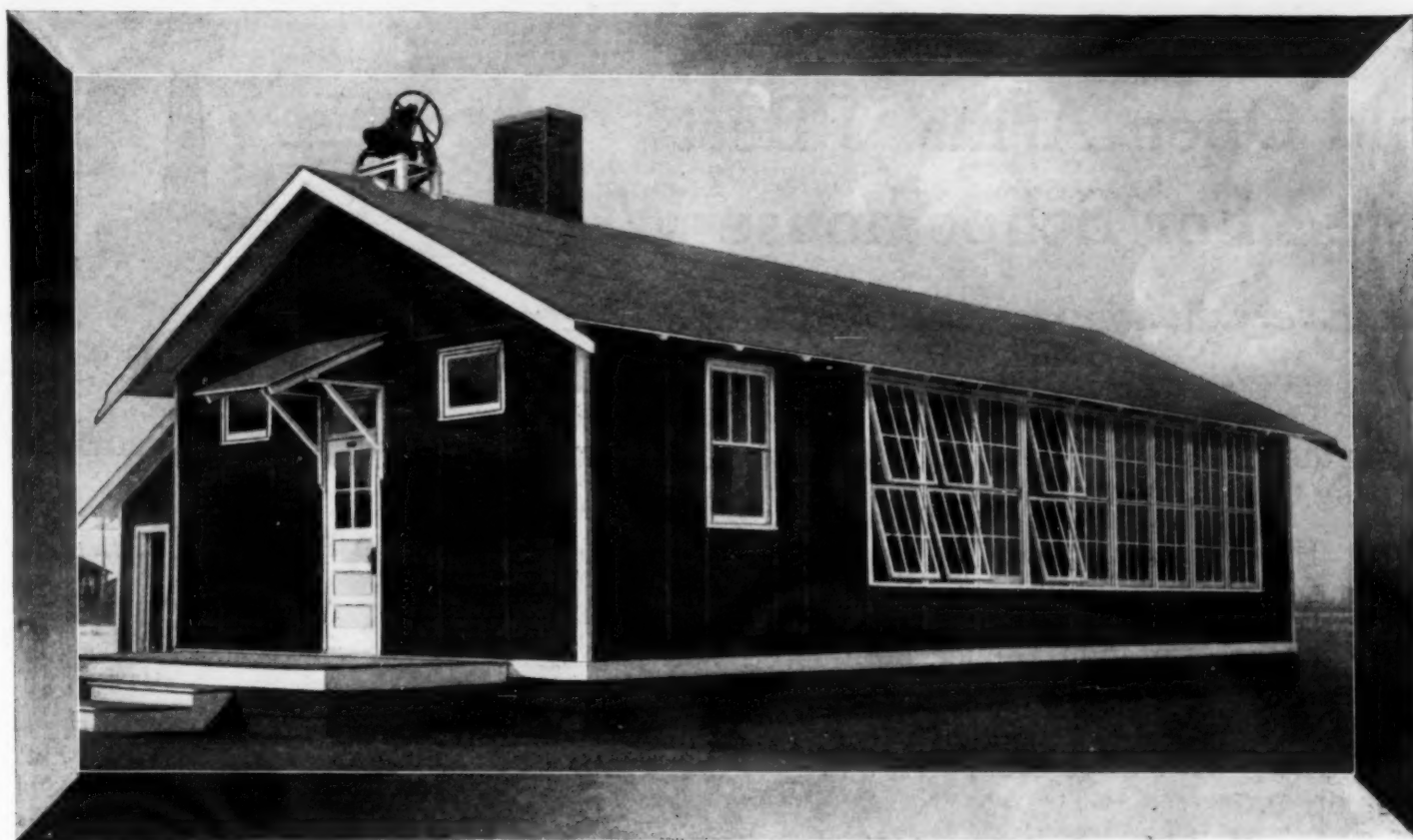
—Hempstead, Long Island, N. Y. Two primary schools now under construction, will be ready for use in September, 1926. Mr. Ernest Sibley, Palisade, N. J., is the architect. Bonds in the amount of \$385,000 were sold on May 3rd, the proceeds to be used in the erection of a high school. The school is located on a site costing \$19,500 and will be completed for use in September, 1927.

—The citizens of Hood River, Ore., recently approved a bond issue of \$89,000 for the purpose of providing funds with which to erect a high school building. The total cost of the building is estimated at \$169,000, \$80,000 of which is to be provided without bonds, leaving \$89,000 to be raised through the sale of bonds.

In carrying on an active campaign for the approval of the bond issue proposition, the school authorities led by Supt. A. M. Gannon, prepared and issued a number of circulars and dodgers calling attention to the school needs. At the first taxpayers' meeting, held on March 23rd, a mimeographed sheet was used, showing the assessed valuation of the district, the estimated cost of the high school proposition, a statement of the financial condition of the school district, and a statement showing the effect of the bond issue on the taxes. This was followed by another sheet directed to the parents, and calling attention to the need of a high school both for the present and for the future. A third sheet was also directed to school patrons and gave twelve reasons why the taxpayers and citizens should vote for the school bonds. A fourth letter was directed to the school patrons, calling attention to the advantages to be derived from a new school with auditorium and asking that each and every one give their vote to the proposition. On the day preceding the election, an announcement in display was inserted in the local newspapers, giving twelve reasons why the citizens should vote for the bonds and a list of the taxpayers and patrons who had endorsed the project.

The successful outcome of the election is largely due to the splendid advertising campaign and to the energetic efforts of the school authorities and the student body.

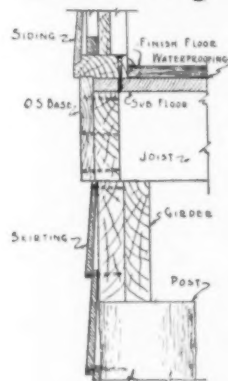
(Continued on Page 110)



These 4 Essential Features Found Only in Circle A Schools

THESE are the essentials of Circle A School Construction, that have brought them universal recognition as "the best among Portable Schools."

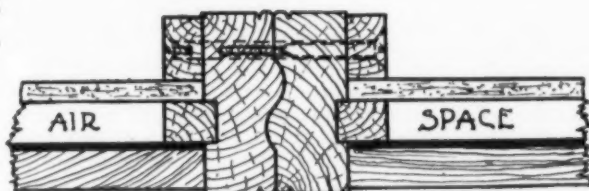
Double Strength in the Foundation



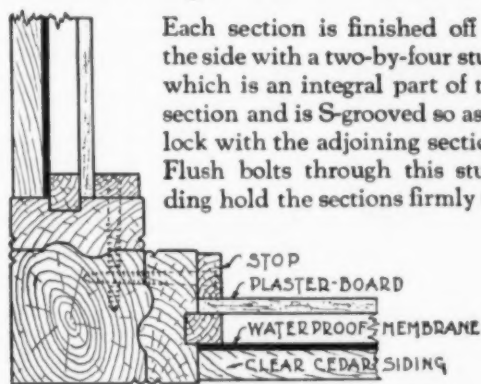
This foundation is designed to carry a building of twice the weight, with live load. The floor level is two feet above ground level. Flooring is double, with weatherproof building paper between. The finish flooring is of high grade Southern Yellow pine.

Weather-tight in Every Part

Wall sections have cedar siding, stained brown; inside of this is a heavy water-proof membrane; then an inch of dead air space, the best possible insulation against heat and cold. Inside is 3/8-inch plasterboard with trim.

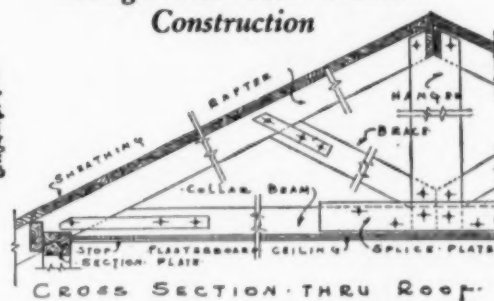


Extra Strength Wherever Needed



Each section is finished off at the side with a two-by-four stud, which is an integral part of the section and is S-grooved so as to lock with the adjoining section. Flush bolts through this studding hold the sections firmly together and give the house the strength of a four-by-four stud every three feet, with a six-by-six post at each corner, just where extra strength is needed.

Stronger than Most Frame Construction



The roof of a Circle A School will withstand a heavy wind, driving rain, or a mass of snow. Roof trusses are bolted and ironed together so as to be actually stronger than most ordinary frame construction. Collar beams span the building every three feet with proper braces and give strength and rigidity. Roofing is Circle A green slate coated asphaltum composition, shipped in rolls.

Circle A Schools are shipped to you complete, with all material necessary for erection, within a very few weeks of receipt of order. If you have not a copy of the Catalog, "Circle A Schools," send for it today.

CIRCLE A PRODUCTS CORPORATION
600 South 25th Street, Newcastle, Indiana

CIRCLE SCHOOLS

The NORTON Closer With Hold Open Arms Is Best Suited For Schoolhouse Work

Every Schoolroom Should Have One

1st. The doors are closed with a uniform speed, which gives the pupils a chance to go through a door without getting caught or injured.

2nd. Having two speeds, the speed at the latch can be set for absolute quiet—no latch necessary.

3rd. The Hold-Open Device connected with the arm of the Door Closer is automatic, a child can operate it—just a push or pull on the door is all there is to do it. Does away with door stop, hook or strap to hold the door open.

SERVICE:—We have expert servicemen on call, free of charge.

PRICE:—The price is right. Send for a representative.

THE NORTON DOOR CLOSER CO.

2900-2918 N. Western Avenue,

Chicago, Illinois.

Use the Norton Liquid Door Closer with Hold-Open Arms and do away with door stop on bottom of door.



A Partial List of Schools NORTON Equipped

Skinner Junior High School,
Denver, Colo.

North East High School,
Minneapolis, Minn.

Chicago Public Schools

Toronto Public Schools

East Side High School,
Cincinnati, Ohio.

Cass Technical High School,
Detroit, Mich.

Technical High School,
Omaha, Nebr.

(Continued from Page 108)

—George J. Ryan, president of the New York City board of education recently announced that nineteen new buildings, affording 25,489 sittings, were under way. The board will have provided from January 1, 1918, to December 31, 1926, a total of 205,037 sittings.

—Construction work on the Theodore Roosevelt High School in the Bronx, New York City, was begun in May. The building will be erected by the Lustbader Construction Company, at a total cost of \$2,309,205.

—The Lincoln school at Dayton, O., has been renamed the G. A. Lange School, in memory of a former principal. A new junior high school has been given the name of Abraham Lincoln.

—Rome, N. Y. A new senior high school was completed and occupied on April 9th. The building is located on a site occupying 4 1/4 acres. It was built to accommodate 615 pupils and cost about \$400,000. The building was erected from plans prepared by Architects Tooker & Marsh, New York City.

—A new school for colored pupils has been completed at Beverly, N. J., and will be occupied in September.

—Providence, R. I. The assistant superintendent in charge of buildings and grounds has been authorized to employ women cleaners for school buildings, not exceeding thirty in number, at wages not exceeding forty cents an hour.

—Dallas, Tex. The school board has adopted plans for removing fire hazards in the schools. Boiler rooms and fuel storage compartments must be enclosed with fireproof walls and doors.

—Walla Walla, Wash. The school board has received bids on a bond issue of \$90,000. The proceeds of the issue will be used in the erection of a new school.

—Puyallup, Wash. The school board has resubmitted a bond issue for the erection of a new school.

—Topeka, Kans. The school board has voted an issuance of \$970,000 worth of school bonds for new buildings and sites.

—Cleveland, O. Projects involving an estimated cost of nearly \$5,000,000 have been included in a memorandum of building operations adopted by the board of education. The building program estimate was prepared by J. W. Barkley and E. U. Widney, and calls for \$4,028,540 for building operations, and \$926,500 for land requirements.

—Warwick, R. I. A new high school is at present nearing completion. The building is located on a seven-acre site, is modern in every respect, and will cost nearly one million dollars. The building will be occupied at the opening of the fall term in September. Four-room additions are being erected for each of the four elementary schools, at a cost of \$150,000.

—Maxwell C. Hutchins, chairman of the Newton, Mass., school committee in its annual report discusses the housing problem which has become acute, and the relief that is contemplated. He recommends the wider use of school buildings for educational, charitable, and social purposes where admission is free. "We have no right to compete with private ownership for special uses that are restricted or exclusive" he says, "or where paid admission is demanded, the proceeds of which are not for the general welfare of the community." The board consists of Elliot B. Church, George E. Tracy, Helen S. Hutchinson, Maxwell C. Hutchins, William F. Coan, Salmon W. Wilder, and William T. Foster.

—In view of the schoolhouse shortage in New York, the Public Education Association of that city says: "Apparently the mere pouring out of millions on new buildings for a 'reserved seat' program will not solve the school housing problem within the financial ability of the city. It therefore seems timely and appropriate for the school and city authorities to consider seriously the suggestion that the existing school buildings be equipped to utilize more effectively the principles of the duplicate or platoon type of organization."

—Staunton, Va. A school bond issue of \$240,000 has recently been sold to a bondhouse in Toledo. The proceeds of the issue will be used in the erection of a high school, which will be ready for use in December.

—Appalachia, Va. A high school costing \$150,000 is in process of completion.

—Canton, N. C. A new school building is planned.

—Spencer, N. C. A modern school will be erected at a cost of \$200,000.

—Hastings-on-Hudson, N. Y. A junior-senior high school, to cost \$325,000, is in process of

erection. The building will contain 23 classrooms, an auditorium, and a separate gymnasium. It will be completed about April 1, 1927.

—The new board of education of Indianapolis, Indiana, is being criticized by the local press. The Indianapolis News says: "If serious interests were not suffering nothing could be more amusing than to sit back and watch the action of the school board. Four months ago the board, as at present controlled, came into power. It inherited plans for a new Shortridge High School, to which no one had objected, and a site for it that was, as far as known, satisfactory to all. The plans were discarded and a search was later begun for another site—or other sites. And now there is neither plan nor site, and no one can tell when the work of construction will begin."

—The Olean, N. Y., board of education will make an addition to school No. 7 to cost \$132,000, and to school No. 8 at a cost of \$55,000.

—The new high school at Wichita Falls, Texas, will be named the Albert Zundelwitz School, in honor of a pioneer citizen. He came when the town had a population of 500. It now has a population of 45,000. He contributed \$30,000 towards the school which is the largest contribution ever made by a local citizen.

—Difficulty has arisen between Louis G. Destremps, the school architect, and the board of education of Fall River, Mass. The architect made plans under the direction of the school committee and when it came to pay for them the city council interposed. The adjustment will have to be in an approval of the plans by the school committee and an acceptance by the city council.

Syracuse, N. Y., has begun a \$5,000,000 school building program. Three schools will be started this year.

—The city council of Neenah, Wis., voted to bond the city for \$350,000 for a new high school. The voters by referendum endorsed the bond issue.

—Wilson, N. C. The town recently voted \$75,000 in bonds for repairing and equipping additional rooms in two school buildings.

(Concluded on Page 112)

MEDART STEEL LOCKERS

8

STOCK SIZES

By standardizing on eight of the most popular sizes—manufacturing in tremendous quantities for stock and immediate delivery—we are now able to offer Medart Steel Lockers at

Much Lower Prices

Don't buy any Steel Lockers until you have learned of the saving this mass production means to you.

These include the eight most popular sizes and styles—

Width		Depth		Height
12	X	12	X	36
12	X	15	X	36
12	X	12	X	60
12	X	15	X	60
12	X	15	X	72
15	X	18	X	72
18	X	18	X	72
18	X	24	X	72



All of these Lockers are equipped with standard louvred doors and finished in green or gray, and all equipment is standard. All are of that same high quality in design, construction and finish that have always made Medart Steel Lockers the first choice of school officials and by far the largest sellers in America. The reduced prices now offered are an additional reason why YOU should specify MEDART.

Profit by this Saving—Write for Locker Catalog A-2

(Yes . . . all sizes, types and finishes of Medart Steel Lockers before manufactured are still being produced)

FRED MEDART MANUFACTURING CO.

POTOMAC AND DE KALB STS. . . . ST. LOUIS, MO.

New York

Cleveland

Detroit

Chicago

San Francisco

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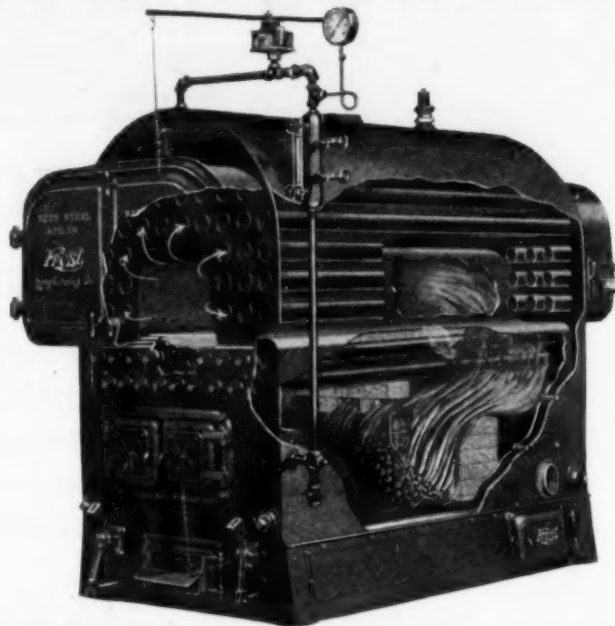


Also manufacturers of Playground Equipment—see announcement on page 122 this issue.

MODERN HEATING APPARATUS MEANS **ROSS** ALL STEEL HEATING BOILERS FOR SCHOOLS

PROGRESS IS THE WATCH-WORD OF TODAY. THE LAST FIVE YEARS HAVE SHOWN GREAT CHANGES IN THE HEATING BOILER. GONE IS THE BULKY, INEFFICIENT BOILER TAKING UP UNNECESSARY ROOM—IN ITS PLACE IS THE COMPACT, EFFICIENT ROSS BOILER.

THE ROSS STEEL BOILER HAS BROUGHT FORTH THE HIGHEST DEVELOPMENT IN HEATING BOILER DESIGN.



THIS BOILER IS ELECTRICAL-
LY WELDED TO PREVENT
LEAKING, BUILT OF STEEL
TO OUTLAST THE BUILDING,
SCIENTIFICALLY DESIGNED
TO SAVE FUEL AND DE-
STROY SMOKE, AND CON-
STRUCTED UNDER THE
STRICT RULES OF THE AMER-
ICAN SOCIETY OF MECHAN-
ICAL ENGINEERS' CODE FOR
HEATING BOILERS.

Complete Catalog Sent on Request. Send Your Plans and Specifications to Our Engineers for Estimate.

The Frost Manufacturing Co.

Galesburg 75 Years of Quality Building Illinois

Also Builders of the Well Known *Frost* Horizontal Return Tubular Boilers

(Concluded from Page 110)

—Wellsville, N. Y. Bonds amounting to \$385,000 were sold on May 3rd for the erection of a junior-senior high school. The school will be ready for use in September, 1927.

—The school board of Tredyffrin Township, Chester County, Pa., has voted unanimously favoring a school loan of \$275,000 for the erection of two elementary schools, one at Strafford, and one at Paoli; and for the purchase of additional grounds for the expansion of the grade schools at Salem and North Berwyn. A bond issue for school building purposes was voted at the May primaries.

—The first public school in any general hospital in the world is the Memorial Hospital School of Johnstown, Pa., which had been organized in connection with the orthopedic department for crippled children in the Memorial Hospital.

—Cadillac, Mich. An appraisal of school property has been made in compliance with a state law. A census of school children has been completed and a report will be presented to the board of education.

—New Haven, Conn. The school board has adopted a building program involving an expenditure of \$2,436,830. The program, which will cover a period of three years, will exceed the income from the mill and a half tax set aside for school buildings and sites, leaving a deficit at the end of that time of \$194,094.

—Mountain View, Calif. The citizens recently carried a bond issue of \$150,000 for a new grammar school. An issue of \$55,000 for a high school shop and gymnasium building failed to carry.

—Lawrence, Mass. The new elementary school has been named the James F. Leonard School in honor of the late ex-mayor of the town.

—Doty, Wash., has voted a bond issue of \$11,370 for a new school, and Dryad has voted an issue of \$9,000 for a new building.

—Warwick, R. I. The cost of maintenance of the schools for the coming year will exceed \$200,000 due to the erection and equipment of a new high school. It is estimated the furnishings for the new building will cost about \$40,000.

—Portland, Ore. At the annual election in June, a bond issue was requested to care for the building program during the next period of years. A tax levy of \$1,250,000 will be asked to take care of the operating costs of the schools for the year.

SCHOOL HOUSE DEDICATIONS

—The new \$1,500,000 Central senior high school at Kenosha, Wis., was formally dedicated in April. The speakers were Superintendent William McAndrew of Chicago, Superintendent F. O. Holt of Janesville, Wis., E. G. Doudna, secretary of the state teachers' association, C. J. Anderson, assistant state superintendent, and Mrs. Mary D. Bradford, former Kenosha superintendent. President Louis W. Powell, of the board of education, formally turned the building over to Superintendent G. F. Loomis.

—Coventry, R. I. The grammar school at Coventry was dedicated on October 23rd with appropriate exercises. Each room in the building was given a flag by the local women's relief corps and the school was presented with a flag by the junior order of American Mechanics of Anthony. A flag staff given by the town council was erected for the dedicatory exercises and the school flag was raised at the time of presentation.

HOW THE DOLLAR WAS SPENT IN NEW JERSEY IN 1924-1925

The cost for state, county and municipal government and public education in New Jersey for 1924-1925, as computed by Herbert N. Morse for the commissioner of education, was \$227,648,819. Of this amount, \$74,531,814 were expended for education, including all state educational expenses. The amount represents 32.7 per cent of the total expenditures.

A graph prepared by the state department shows that out of every dollar expended in New Jersey for 1925, the municipal government cost 38.9 cents; education, 32.7 cents; the county, 15.8 cents, and the state, 12.6 cents.

It is reported that \$162,745 were spent for state administration of schools, \$244,861 for county administration, and \$1,595,433 for local school administration. This is a total of \$2,003,040 and represents 2.7 per cent of the total expended for education, or 2.7 cents out of every dollar expended. State administration cost 2 cents out of every dollar; county administration

.3 cents, and local administration 2.2 cents. State educational institutions cost the state \$2,415,833, of which normal schools cost \$934,899. The cost of state educational institutions was 3.3 cents out of every dollar. Operating expenses required an additional \$5,870, or 1.6 cents out of every dollar. Salaries and expenses of teachers amounted to \$40,358,731, or 54.1 cents out of every dollar. Operation and maintenance cost \$9,233,167, or 12.4 cents out of every dollar. Miscellaneous items cost \$5,427,842, or 7.3 cents out of every dollar, and debt service cost \$11,034,428, or 14.8 cents out of every dollar.

School Finance and Taxation

—The Tacoma, Washington, school board has agreed to submit once more the question of adding 3 mills to the school tax. Owing to a lack of general knowledge on school needs, the proposition was voted down at a former election. The Tacoma Ledger says: "The estimated cost of operation of the several schools is \$1,701,978, while necessary improvements to grounds and necessary equipment would cost another \$62,700. This means that proper maintenance of the schools for the year would cost \$1,764,679. Under the revenues to be derived from present sources there would be an income of \$1,562,565.44. Obviously that would mean a deficit of considerable proportions. The board has carefully canvassed the situation and it has been unable to figure out where any cuts in expenses could be made to take care of the deficit. A committee of citizens waited upon the board and protested against any increase in taxes, but when asked how the expenditures could be made to fit the income the only suggestion was that salaries of teachers might be cut something like 10 per cent. It is a fact that salaries for teachers are no higher in Tacoma than in other cities of like population, hence to cut salaries would inevitably mean the loss of high grade teachers of which Tacoma has been so proud. That would mean a lowering of the standard of the Tacoma schools, and the public may easily figure out the rest of the story."

—Pontiac, Mich. In addition to its annual budget of \$782,820, the citizens, in April, voted \$194,888 for the erection of a new grade school

(Concluded on Page 114)



41 American Blower Branch Offices Now Offer the Universal Heating and Ventilating Unit

Proved by 13 years' use—6,700 units in satisfactory operation

A phone call, letter or personal inquiry at any of our offices listed on this page will bring you complete data, prices, etc., on the Universal Heating and Ventilating Unit—a unit that has been proved by 13 years use—and 6,700 units in satisfactory operation.

AMERICAN BLOWER COMPANY, DETROIT
BRANCH OFFICES IN ALL PRINCIPAL CITIES
CANADIAN SIROCCO COMPANY, LIMITED, WINDSOR, ONTARIO

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Buffalo, N. Y.
White Bldg.
Charlotte, N. C.
Piedmont Bldg.
Chicago, Ill.
140 S. Dearborn St.
Cincinnati, O.
Keith Bldg.
Cleveland, O.
Sweetland Bldg.
Columbus, O.
First National Bank Bldg.
Dallas, Tex.
Mercantile Bank Bldg.

Davenport, Iowa
Kahl Bldg.
Denver, Colo.
1228 California St.
Detroit, Mich.
2539 Woodward Ave.
El Paso, Texas
1520 North Campbell St.
Grand Rapids, Mich.
Shepard Bldg.
Indianapolis, Ind.
Continental Bank Bldg.
Kansas City, Mo.
Mutual Bldg.
Louisville, Ky.
428 South Fifth St.
Los Angeles, Cal.
Detwiler Bldg.
Milwaukee, Wis.
Majestic Bldg.
Minneapolis, Minn.
808 LaSalle Ave.

New Orleans, La.
344 Camp St.
New York, N. Y.
50 Church St.
Omaha, Neb.
Peters Trust Bldg.
Philadelphia, Pa.
112 S. 16th St.
Pittsburgh, Pa.
Oliver Bldg.
Portland, Ore.
Pacific Bldg.
Rochester, N. Y.
Cutler Bldg.
Salt Lake City, Utah
Dooly Bldg.
San Francisco, Calif.
Rialto Bldg.
Seattle, Wash.
Leary Bldg.
Schenectady, N. Y.
147 Jay Street

St. Louis, Mo.
Boatman's Bank Bldg.
Syracuse, N. Y.
1611 East Genesee St.
Tacoma, Wash.
1127 St. Paul Ave.

Canadian Sirocco Co., Ltd.

Montreal, Que.
144 Inspector St.
Calgary, Alta.
605 W. Second St.
Winnipeg, Man.
567 Banning St.
Vancouver, B. C.
612 Standard Bank Bldg.
Windsor, Ont.
McDougall & Banwell Sts.

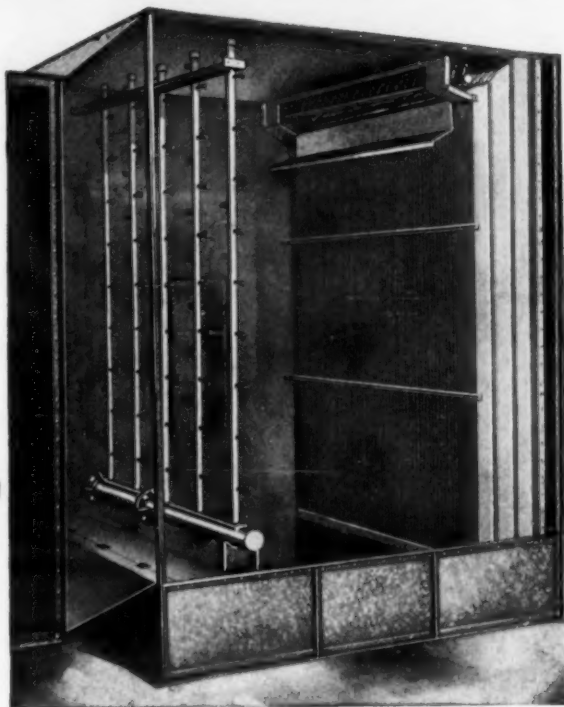
American Blower (531)
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(Concluded from Page 112)

to replace the Bagley School. The board was given \$20,000 more than was asked for.

—The proposition to increase the tax rate for school purposes was defeated at Bloomington, Illinois, by the voters. Only a small fraction of the voters turned out.

—The Wichita, Kansas, board of education has accepted Superintendent Mayberry's ten-year program which entails a building outlay of \$3,184,000. The Wichita Beacon says: "The policy adopted by the board is not to issue any more school bonds. The present levy will take care of all the expense of maintaining the schools, repairs, replacements and new buildings. At the same time it will pay off outstanding bonds and interest and therefore the interest account will be reduced from year to year. The program will take care of two new high school buildings and the required number of grade school buildings and additions. It is all a matter of simple arithmetic which cannot be controverted except by some unforeseen calamity or emergency."

—The school budget of the Boston, Mass., board of education has been increased over 1925 by \$2,738,406, thus making a total of \$14,005,274. There is also an item of \$1,691,898 to be used for alteration and repair of school buildings. The increase in the budget is in part due to the fact that the expenditure for 1925 covered eleven months, while the budget for 1926 covers twelve months. It is also in part due to the increase in teachers' salaries.

—Utah has \$19,000,000 invested in school buildings and sites, and a school population of 139,437. Daggett with a school population of 115 children has a school investment of \$18,291. North Summit, school population 774, invested \$225,000; Beaver, school population 1,473, with a school investment of \$436,043.40. The Salt Lake City in commenting on these figures says: "We need good schools; we need good teachers and we need comfortable school-rooms for the students, but the whole should be based upon the purse strings of the community directly involved. If private business made charges in proportion, the ordinary individual would have to earn about \$100 per day in order to live. However schools and automo-

biles appear to be legitimate prey for taxation and it appears that the thing is being greatly overdone."

—The total cost for 1905 for schools in Ohio was \$19,017,339, and in 1925, \$120,183,310. The "Ohio Teacher" attributes the rise to the increased population and the fall in the purchasing power of the dollar. The careless student, it holds, would believe that the schools had been too liberally financed. Of the 35,000 school rooms in Ohio, more than 15,000 are inadequately financed.

—A school bond issue of \$75,000 was carried by Fulton township, Fulton County, Ohio, two to one. This sum together with \$20,000 insurance money will enable the board to replace the building lost by fire.

—The Iron River, Mich., school district after two unsuccessful attempts voted \$300,000 for a new high school. There was a majority of 50 on a vote in excess of 500. The minority did not oppose a high school, but held that a smaller expenditure would suffice. The Iron Mountain News, in commenting on the result, says: "If a community under-builds it makes certain that within a few years there will be a demand for more facilities, with the result that it will have a larger investment than if it built more generously in the first instance. On the other hand, if it over-builds it unnecessarily burdens itself with a high carrying charge, the necessity of making larger sinking fund provision for retirement of bonds and a comparatively high cost of maintenance."

—Governor Smith of New York State has approved the Cole bill, under which the state will increase its annual quota for the aid of rural schools by more than \$9,000,000. The quota for each rural school district employing more than one teacher has been increased from \$450 to \$500, and for each district with only one teacher the increase is from \$250 to \$300.

—The county superintendents' association of Washington has adopted a recommendation of the legislative committee, providing for the creation of a special fund for the equalization of educational costs, and to insure equal educational advantages for all the children of the state.

—School and state school distributions made to the county school districts of Washington total \$116,325, according to A. F. Krohn, county superintendent. The county distribution is \$36,466 and the state distribution \$79,859.

—Cleveland, O. The school board has adopted a budget of \$20,528,000 for the school year 1926-1927. The amount is \$1,500,000 more than the budget request for the current year.

—The Aberdeen, Washington, school system is on a cash basis for the first time in fourteen years. That means that there will be no interest charges to pay on warrant indebtedness. The Aberdeen World in commenting on the situation says: "A niggardly policy of retrenchment, under which provisions were not made for properly housing pupils—as, through necessity, has been the case in late years with many a town—or for engaging a sufficient number of teachers or paying them adequate salaries, would have brought about the same result. But there has been no parsimony in the conduct of Aberdeen schools. New buildings have been erected as needed."

—John M. Callahan, state superintendent of Wisconsin urges a state support plan whereby the state contributes 30 per cent, the county 30 per cent, and the locality 40 per cent. "Inequalities in school districts," he declared, "are common in both common and high school districts. For example, there are districts in the southern part of the state where the property evaluation is as high as \$875,000 while there are other districts where the property evaluation is as low as \$38,000."

PERSONAL NEWS

—Mr. G. A. Sullards of Humphrey, Ark., has been elected superintendent of the Redfield Consolidated Schools.

—Mr. H. L. Ronnel, of St. Francis, Minn., has been elected superintendent of schools at Chatfield.

—F. W. Robbins, superintendent of schools at Williamsport, Pa., for a number of years, has retired after a long period of service. Mr. A. M. Weaver succeeds Mr. Robbins.

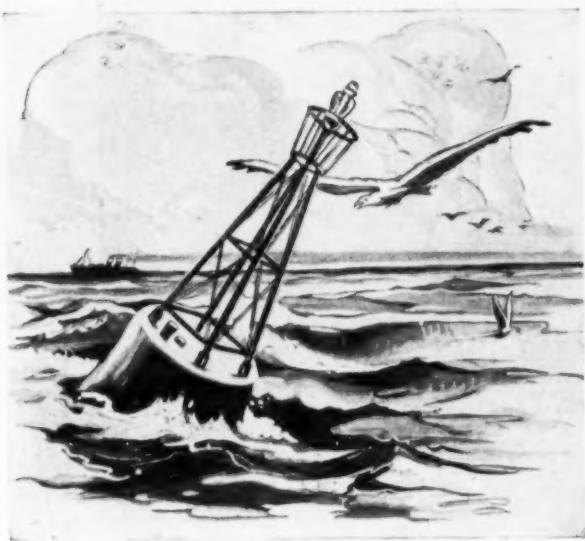
—Mr. B. R. Porterfield of Deaver, Wyo., has been elected superintendent of schools at Upton, with a substantial increase in salary.

—Mr. H. C. Miller of Washington, N. C., has been elected superintendent of schools at Mooresville.

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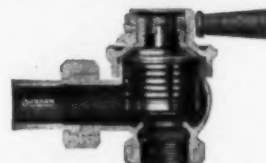
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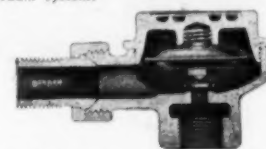
Somebody Had to Place The Buoy

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TEACHERS' SALARIES

SALARY SCHEDULE AND TEACHER-RATING PLAN AT MARION, ILL.

The school board of Marion, Ill., has adopted a salary schedule and rating plan for the school year 1926-1927. Under the schedule no teacher may receive more than a \$5 a month increase.

Under the plan, teachers' salaries are to be fixed according to the rating of the Illinois distributive fund system, merit ratings, and Palmer diploma. The superintendent must determine the merit grades.

Teachers of the second, third, fourth, fifth, and sixth grades: Distributive budget D, merit C, \$75; distributive fund C adds \$5 a month, fund B adds \$10 a month, and fund A \$15 a month. Merit C adds \$5 a month, merit B \$10 a month, and merit A \$15 a month. The Palmer diploma adds \$5 a month.

Under the rules, six years of training, or a normal school diploma are required above the eighth grade; in lieu of this a teacher must attend a recognized teachers' professional summer school. Teachers are rated on the basis of training, experience, merit and Palmer diploma. In grades two to six, teachers will receive \$75 to \$110 per month, while in grades one, seven and eight they will receive \$85 to \$120.

NEW SCHEDULE FOR SHELBYVILLE, IND.

—Shelbyville, Ind. The school board has adopted a single salary schedule which is intended to care for elementary teachers, junior high school and senior high school teachers. The schedule fixes a uniform standard for all instructors, establishes semester hours as the unit of training in place of weeks, provides for the exceptional or superior teacher, and spreads the salary increases over the period of the teacher's growth in service. A summary of the schedule follows:

Elementary teachers: Teachers in Group I, with 36 weeks' training and one year of experience, will receive salaries ranging from \$900 to \$1,125, and increases of \$75; teachers in Group

II, with 72 weeks' training and two years' experience, will receive salaries of \$1,000 to \$1,500, and increases of \$75; teachers in Group III with 108 weeks' training and four years' experience, will receive salaries of from \$1,200 to \$1,600, with increases of \$75.

Junior High School Teachers: Teachers in Group I, with 72 weeks' training and one year's experience, will receive salaries ranging from \$1,100 to \$1,375, and increases of \$75; teachers in Group II, with 108 weeks' training and two years' experience, will receive salaries ranging from \$1,200 to \$1,600, and increases of \$100; teachers in Group III, with 144 weeks' training and four years' experience, will receive salaries ranging from \$1,400 to \$1,800, with increases of \$100.

Senior High School Teachers: Teachers in Group I, with 144 weeks' training and one year's experience, will receive salaries ranging from \$1,400 to \$1,600, with increases of \$100; teachers in Group II, with 144 weeks' training and four years' experience, will receive salaries ranging from \$1,600 to \$2,000, with increases of \$100.

CANANDAIGUA SALARY SCHEDULE

The school board of Canandaigua, N. Y., has adopted a salary schedule governing elementary and secondary schools and supervisors.

Elementary—Group B teachers in kindergarten and sixth grades will receive a minimum of \$1,200, and a maximum of \$1,800 which is attained by eight increases of \$75 each; Group A teachers will receive a minimum of \$1,800, and a maximum of \$2,250, which is attained by six increases of \$75 each; in Group B1 departmental teachers will be given a minimum of \$1,250, and a maximum of \$1,850, attained by eight increases of \$75; in Group B2, atypical teachers will receive a minimum of \$1,250, and a maximum of \$1,850, attained by eight increases of \$75 each; in Group B3, librarians will receive a minimum of \$1,250, and a maximum of \$1,850, attained by eight increases of \$75; teachers in Group A, 1, 2, and 3 above will receive a minimum of \$1,850, and a maximum of \$2,300, attained by six increases of \$75 each; assistant kindergarten and physical training teachers will receive a minimum of \$1,200, and a maximum of \$1,500, with four increases of \$75 each.

Secondary—Group B teachers will receive a minimum of \$1,350, and a maximum of \$2,150, attained by eight increases of \$100 each; Group A teachers will receive a minimum of \$2,150, and a maximum of \$2,750, attained by six increases of \$100 each.

Group B supervisors will receive a minimum of \$1,350, and a maximum of \$2,150, with eight increases of \$100; Group A supervisors will be given a minimum of \$2,150, and a maximum of \$2,750, with six increases of \$100.

Principals—Principals in the union school will receive a minimum of \$1,350, and a maximum of \$2,150, with eight increases of \$100; principals in the academy will receive a minimum of \$2,500, and a maximum of \$3,500, with eight increases of \$125 each.

NEW SALARY SCHEDULE AT BATTLE CREEK

—Battle Creek, Mich. The school board in giving salary increases has rated the teachers for the year 1926-1927. Teachers are rated as good, strong and superior, the rating of good carrying with it an additional \$50; strong, \$100, and superior, \$125.

The salary schedule for the elementary schools, including the junior high school, provides for a minimum of \$1,200, with maximum salary of \$1,400, \$1,600 and \$1,700 for good, strong, and superior teachers. Further maximums of \$1,750, \$1,800, \$1,850, and \$1,900 are provided for teachers having additional credits or possessing degrees.

The minimum salary in the high school is fixed at \$1,400. Women teachers receive salaries of \$1,600, \$1,800, \$1,900, and \$2,000 based on ratings of good, strong and superior teachers.

Men teachers are paid on the following basis: With laboratory work, good, \$2,100; strong, \$2,400; superior, \$2,500; superior with master's degree, \$2,600; without laboratory work, good, \$2,000; strong, \$2,300; superior, \$2,400; superior, with master's degree, \$2,500.

NEW SCHEDULE AT NORWALK

—Norwalk, Conn. A salary schedule, giving each teacher a flat yearly increase of \$50, together with higher minimum and maximum salaries, has been adopted by the school board. The increases are included in new rules and regulations governing the salaries of teachers.



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Included in the rules are provisions tending to raise the standards of teachers in the school system. Graduates of the high school, who are also graduates of normal schools or colleges, may be appointed as teachers without experience, provided their rating places them in the upper third of their class in normal school or college. Candidates who cannot qualify must show evidence of two years' experience elsewhere prior to appointment.

A diploma from a normal school, or college, or its equivalent, constitutes the minimum requirement for teachers in grades one to eight. A bachelor's degree from a college or university, or its equivalent, constitutes the minimum requirement for teachers of academic subjects in grades nine to twelve. Teachers, after appointment, may increase their salaries by securing credits for professional study and improvement. The schedule is as follows:

I—Elementary Schools (Kindergarten Through Grade Six)

		Possible with extension credits
Beginners	\$1000	
Exp. 1 year	1100	1150
Exp. 2 years	1200	1300
Exp. 3 years	1300	1450
Exp. 4 years	1400	1600
Exp. 5 years	1500	1700
Exp. 6 years	1600	1800
Exp. 7 years	1650	1850
Exp. 8 years	1700	1900
Exp. 9 years	1750	1950
Exp. 10 years	1800	2000

Junior and Senior High Schools (Grades Seven Through 12)

	Women	Men
Beginners	\$1100	\$1000
Exp. 1 year	1200	1700
Exp. 2 years	1300	1800
Exp. 3 years	1400	1900
Exp. 4 years	1500	2000
Exp. 5 years	1600	2100
Exp. 6 years	1700	2200
Exp. 7 years	1800	2300
Exp. 8 years	1900	2400
Exp. 9 years	1950	2450
Exp. 10 years	2000	2500

(Possible With Extension Credits)

	Women	Men
Exp. 1 year	\$1250	\$1750
Exp. 2 years	1400	1900
Exp. 3 years	1550	2050
Exp. 4 years	1700	2200
Exp. 5 years	1800	2300
Exp. 6 years	1900	2400
Exp. 7 years	2000	2500
Exp. 8 years	2100	2600
Exp. 9 years	2150	2650

Exp. 10 years..... 2200 2700
(B)—For graduates of a four-year accredited college.

	Women	Men
Beginners	\$1300	\$1800
Exp. 1 year	1400	1900
Exp. 2 years	1500	2000
Exp. 3 years	1600	2100
Exp. 4 years	1700	2200
Exp. 5 years	1800	2300
Exp. 6 years	1900	2400
Exp. 7 years	2000	2500
Exp. 8 years	2100	2600
Exp. 9 years	2200	2700
Exp. 10 years	2300	2800

(Possible With Extension Credits)

	Women	Men
Exp. 1 year	\$1450	\$1950
Exp. 2 years	1600	2100
Exp. 3 years	1750	2250
Exp. 4 years	1900	2400
Exp. 5 years	2000	2500
Exp. 6 years	2100	2600
Exp. 7 years	2200	2700
Exp. 8 years	2300	2800
Exp. 9 years	2400	2900
Exp. 10 years	2500	3000

(C)—Teachers holding an M. A., degree shall receive \$100 above the scheduled rates in section B, above.

1. Elementary school teaching principals or head teachers shall receive \$25 for each teacher in the building over and above the scheduled salary.

2. All other salaries shall be fixed from year to year by the board of education upon recommendation of the superintendent of schools.

—Seymour, Conn. The school board has raised the salary of the grade teacher to \$1,550, and that of the high school teacher to \$1,700.

TOPEKA INCREASES MAXIMUM PAY

—Topeka, Kans. A salary schedule increasing the maximum pay of teachers of long experience has been adopted by the school board. The new schedule will go into effect with the school year in September. It provides for the following salaries:

Teachers having high school education or equivalent, begin at \$1,150 and increase each year until maximum of \$1,700 is reached at twelfth year; teachers having one year of education beyond high school, begin at \$1,200, reaching maximum of \$1,700 at eleventh year; teachers having normal school education or two years beyond high school, begin at \$1,250, reaching maximum of \$1,700 at tenth year; those having three years education beyond high school, begin

at \$1,300, reaching \$1,700 at ninth year; those having four years beyond high school, begin at \$1,350, reaching the maximum at the eighth year.

High school teachers who have had two years of high school work and have a high school certificate will receive \$1,450 the first year, with \$2,000 maximum the twelfth year; those having the high school certificate and three years education beyond high school will receive \$1,500 to \$2,000 maximum in eleventh year, and teachers who are college graduates will receive from \$1,550 to \$2,000 maximum the tenth year. Principals' salaries will be determined by the board with education and experience as a basis.

TEACHERS' SALARIES

—Longview, Wash. In adopting a new salary schedule, the board has ruled that teachers in the grades must have at least two years of normal training in addition to a high school education, and that high school teachers must have had at least a four-year college course. Salaries and annual increases will be based on previous experience and preparation of teachers. Teachers of four years or more experience in the grades will receive increases of \$10 per month the second year, \$7.50 the third, and \$5 the fourth year. Those of less than four years' experience will receive an increase of \$7.50 the second year, the same the third year, and \$5 the fourth year. The salaries of teachers will be paid in twelve installments instead of nine as previously.

—Seymour, Conn. The school board has adopted a salary schedule for the grades and high schools. The schedule provides that teachers who take summer school work shall be given a refund of \$50 toward the payment of their expenses. The schedule provides for the following salaries:

Grades two, three, four, five, and six, first year, \$950; second year, \$1,050; third year, \$1,150; fourth year, \$1,250; fifth year, \$1,350; maximum, \$1,450.

Grades one, seven, and eight, first year, \$1,000; second year, \$1,100; third year, \$1,200; fourth year, \$1,300; fifth year, \$1,400; maximum, \$1,500.

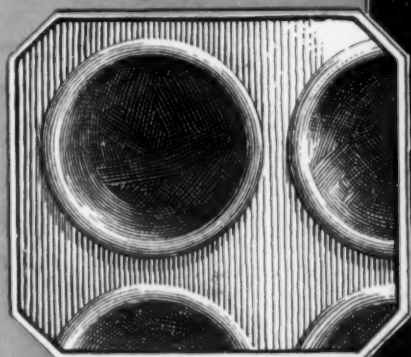
High school, first year, \$1,200; second year, \$1,300; third year, \$1,400; fourth year, \$1,500; fifth year, \$1,600; maximum, \$1,700.

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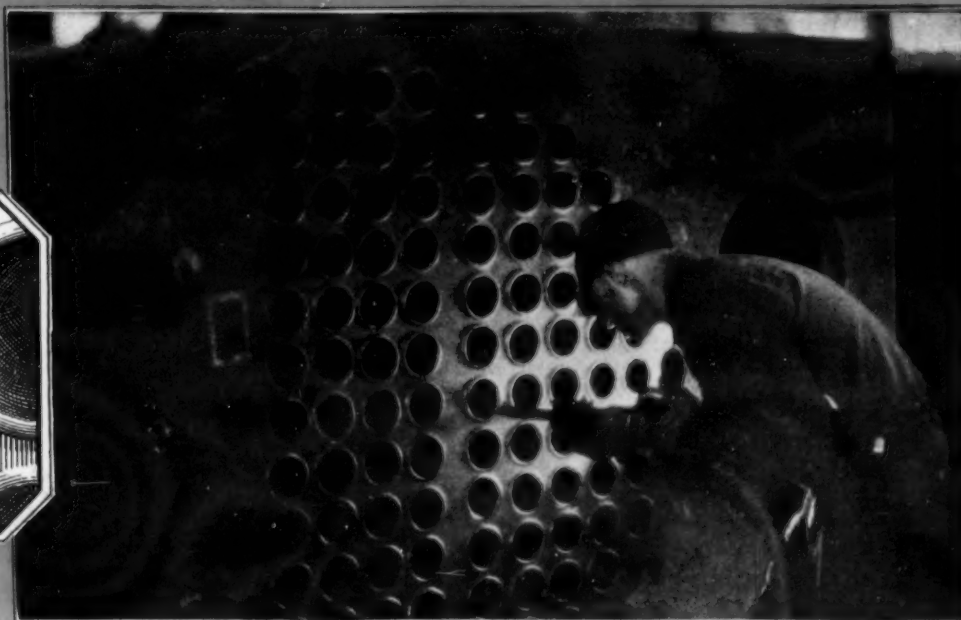
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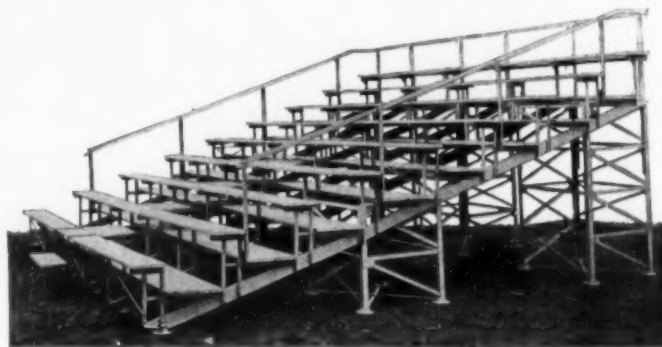
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(Concluded from Page 118)

—Ottumwa, Ia. Under a new salary schedule, grade teachers will be given increases of \$60, up to a maximum of \$1,310, and high school teachers will be given increases of \$25, up to a maximum of \$2,000 for men teachers and \$1,600 for women teachers. The board will continue the bonus payments of \$50 where teachers remain for the entire school year.

—Lewiston, Pa. The school board in adopting a salary schedule for the teaching staff, has provided for fixed minimum salaries for principal and supervisors, which are minimum amounts only, and which do not provide for any scheduled advances.

Under the schedule, principals with two years' experience will receive a minimum of \$1,100; principals with three years' experience will receive \$1,300, and those with four years' experience \$1,500. The junior high school principal will receive a minimum of \$2,000, and the senior high school principal a similar amount.

Supervisors with two years' experience will receive a minimum of \$1,200; supervisors with three years' experience will receive \$1,400, those with four years' experience \$1,600; P. G., of one year, \$1,800, and P. G., two years, \$2,000.

—Kent, O. The school board has adopted a minimum salary of \$1,000 a year for teachers in the grades, with increases of \$50 up to a maximum of \$1,500. The increases are based upon merit and may not be given in recognition of years of service. Teachers who receive increases must be active in community welfare and must grow professionally.

The rules provide that new teachers shall have at least two years of normal training or the equivalent. Teachers in active service must keep informed as to educational movements, methods and devices, by reading the best educational journals and books pertaining to their work.

—Chicopee, Mass. The school board has approved a new schedule of salaries, giving to those who have served for seven consecutive years increases of \$100 per year.

Under the schedule, elementary teachers will be paid on the following basis: \$1,000 for the first year; \$1,100 for the second; \$1,200 for the third year; \$1,300 for the fourth year; \$1,400

for the fifth; \$1,500 for the sixth, and \$1,600 for the seventh year.

Junior high school and opportunity instructors will be paid at the rate of \$1,100 for the first year, \$1,200 the second, \$1,300 the third, \$1,400 the fourth, \$1,500 the fifth, \$1,600 the sixth, and \$1,700 the seventh year.

High school instructors will receive \$1,500 the first year, \$1,600 the second, \$1,700 the third year, \$1,800 the fourth year, \$1,900 the fifth year, \$2,000 the sixth, and \$2,100 the seventh year.

—The average salaries of elementary and junior high school teachers in Carbon County, Utah, for the school year 1924-1925 were somewhat below the average for the state, while the average for the high school teachers and principals in the district is higher, according to Supt. D. C. Woodward of Carbon County.

There are three teachers in one-room schools in Carbon County whose average yearly compensation is \$817.03, as compared with an average of \$820.66 for the state. An average salary of \$980 per year was paid 107 teachers in two-room and larger elementary schools of the county, while the remuneration of nineteen principals of elementary schools amounts to \$1,570. The figures for the state as a whole give salaries of elementary school teachers as \$1,062, and of principals of these schools, \$1,402.

Nine junior high school teachers of the county drew an average salary of \$1,225, as compared with \$1,392, the average compensation of the 428 junior high school teachers of Utah. The compensation of the sixteen high school teachers averaged \$1,728, as against \$1,521 for the state. High school principals' salaries in the state amounted to \$2,128, and in the county to \$2,750.

—Providence, R. I. A salary schedule for teachers and principals involving an additional outlay of approximately \$100,000 a year, to become effective in September next, has been recommended to the school board by Supt. I. O. Winslow. The revised schedule provides for an increase in the basic maximum of principals and teachers, and removes certain restrictions which enable others to attain the maximum in a shorter period of time.

For primary and grammar teachers the maximum is increased \$50 a year, while a large number of teachers selected for special work

will receive an increased maximum of \$100 a year. The schedule removes the restrictions on the promotion of high school teachers, and eliminates the designation of non-academic teachers, placing all teachers on one list, with salaries based on experience.

—Danbury, Conn. The school board has adopted a salary schedule which increases the maximum salaries in the school system by \$200, and raises the annual increment of teachers and supervisors from \$50 to \$100. The minimum salaries remain at \$1,000 for the grades and \$1,600 in the high school.

Under the schedule, the maximum salary of grade teachers is raised from \$1,600 to \$1,800, and that of high school teachers from \$1,800 to \$2,000. Heads of departments have been raised to a maximum of \$2,500. Supervisors and special teachers have been advanced to a maximum of \$2,000, with annual increases of \$100.

The superintendent of schools has been advanced from \$5,500 to \$5,750, and the principal of the high school from \$4,100 to \$4,200. The assistant principal has been raised from \$2,700 to \$2,800.

—Evansville, Ind. The school board has adopted a single salary schedule providing salaries in proportion to training for all teachers, both in elementary and secondary schools. The schedule calls for minimum and maximum amounts for teachers of all classes, salaries advancing on a fixed scale with each year of service. The schedule is as follows:

For teachers with two years' training or equivalent, \$1,200 a year minimum with annual increment of \$100 and \$50 to \$200 for travel and further training. Superior teachers would be paid \$150 annually increment. Maximum salary is set at \$2,000 for average good teacher, \$2,400 for superior teacher.

For teachers with three years' training, \$1,400 minimum, same increments and maximums of \$2,400 and \$2,600.

For those with four years' training, \$1,600 minimum, same increments, and maximums of \$2,800 and \$3,100.

For teachers holding master's degrees, \$1,800 minimum, same increments, and maximums of \$3,000 and \$3,500.

For department heads in high schools, \$2,000 minimum and maximums of \$3,200 to \$3,500.



THE **FUN-FUL** LINE PLAYGROUND EQUIPMENT

FUN-FUL Playground Equipment is the result of experience, a quarter of a century devoted exclusively to the development and manufacture of children's outdoor health building goods by this Company. The best you can buy, this we guarantee.

We offer the most comprehensive line to select from, nothing but approved and guaranteed apparatus.

Sold by the leading school supply houses throughout the United States, Canada and Mexico.

Largest manufacturers of Playground Equipment

Awarded Gold Medal Brazilian Centennial Exposition, 1923

HILL-STANDARD CO.

ANDERSON

Established 1900

INDIANA, U. S. A.

MEDART PLAYGROUND EQUIPMENT

Gives Years of Service!



You have every right to expect years of satisfactory and economical service from Medart Playground Apparatus. The manufacturer has utilized all the knowledge accumulated in 53 years of experience, to make equipment that is absolutely safe and dependable, that will withstand rough treatment and exposure to the weather and that possesses the features most attractive to the child. Medart Playground Apparatus will be in service long after the children who use it have children of their own. Send for 40-page Playground Catalog M-5.

Also manufacturers of Steel Lockers—see announcement on page 111 of this issue.

FRED MEDART MANUFACTURING CO.

POTOMAC AND DE KALB STS. - - - ST. LOUIS, MO.

New York

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TEACHERS AND ADMINISTRATION

—The Chicago board of education has recently put into effect a new teacher rating system. The plan calls for a numerical percentage marking on six specific professional characteristics, and a listing of "demerits" or specific deficiencies. A rating between 79 and 75 on a basis of 100 is "unsatisfactory." Below 75 is "inefficient."

The plan was devised by the Chicago School Teachers' Council, in cooperation with the principals' club, the board of superintendents and others, and went into effect on February first.

The half dozen professional characteristics and the maximum rating values applied to them are:

- A—Knowledge of subject, ten points.
- B—Teaching ability, 20 points.
- C—Progress of pupils, 30 points.
- D. Cooperating with pupils and community, ten points.
- E—Cooperation in school management, fifteen points.
- F—Professional standing and growth, fifteen points.

The purpose of the rating plan is the maintenance and increase of efficiency, the recording of material of value in considering promotion of teachers, dismissals; or emphasizing improvements undertaken, and as a basis for supplies to inquiries from school systems to which teachers apply for appointments.

—Dr. John L. Tildsley, district superintendent of the New York City schools in a public address charged that the board of education lacked in a professional spirit and then held that the teachers were equally guilty. "Teachers today do not realize that the schools exist for one purpose alone—that of service to the children," he asserted. "It is almost impossible to induce them to discuss school problems objectively. They invariably take the viewpoint of the teachers and not that of the children."

—The maximum annual salary of teachers in the elementary grades of the Philadelphia public schools has been raised \$400 by the board of education. The new maximum salary will be \$2,400; the minimum will remain at \$1,200, and the increases will be graduated at the rate of \$100 each year for the next four years. The

raise will affect 2,500 elementary teachers, and will cost \$2,700,000 from 1926 to 1929. The increase will be taken care of by increased assessments through the raising of property values and no addition to the school tax will be necessary.

—The Johns Hopkins University has established the Edward Franklin Buchner Research Fund in Education in connection with the celebration of the fiftieth anniversary of the University. The fund has been named in honor of the man who has done so much to make the study of education a force in the lives of teachers and in the development of school systems.

A fund of \$50,000 has been proposed, the income of which will be used to expand the research work of the department of education, including necessary financial assistance to students engaged in educational investigations.

The University has effectively aided in the training of teachers and officers required for the execution of education policies. The history of the department of education, the college for teachers and the summer session reveals public service of a distinctive character.

—Jamestown, N. D. The school board has adopted a salary schedule which provides that a one-year normal graduate shall receive \$900,

(Continued on Page 125)



WESTERN PROGRESS IN THE EAST.

Canton—Girls of China waiting for the Ford school bus to take them down to their institution of learning. The girls dress as modern as their western sisters, except that no bobbed heads are seen. (Int. News Reel Photo.)

One arch enemy beaten for years to come!



END those constant, those ever-recurring expenses for window shade replacement! Stop thinking of window shades as a perishable item, demanding constant—and expensive—replacement!

Shades of du Pont Tontine have done away with the weaknesses of the old-fashioned, perishable type of shade. For this new shade cloth is impregnated with pyroxylin—which makes it proof against cracking and checking, fading and fraying.

And, after a season's use, the original beauty of du Pont Tontine can be restored by washing with soap and water and a scrubbing brush!

This year, specify du Pont Tontine and eliminate for years to come incessant replacement costs—that inveterate enemy of economical school boards!

On request, and without any obligation to you whatsoever, we will send swatches of color No. 508, Afterglow, already tested and adopted by scores of up-to-date municipalities for their school systems.

WASHABLE
DU PONT
TONTINE

WINDOW SHADE CLOTH

E. I. DU PONT DE NEMOURS & CO., Inc.
NEWBURGH, N. Y.

(Continued from Page 122)

plus \$50 for each year of successful experience after graduation up to seven years; two-year normal graduates will receive \$1,000, plus \$50 for each year of experience; three-year normal graduates will receive \$1,100, plus \$50 for each year of experience, and four-year college graduates will receive \$1,200, plus \$50 for each year of experience.

Teachers beginning work in Jamestown will not be credited with more than five years' successful experience. Rural school experience will be counted at not more than \$25 per year, except under extraordinary conditions. In general, at least two years of experience will be required of all teachers employed.

—Cloquet, Minn. The board of education has adopted a salary schedule for teachers with the following maximums: Teachers of the first six grades, \$135 per month; kindergarten, seventh and eighth grades, \$140 a month; elementary grade principals, \$150; women teachers in high school, \$165; department heads, \$180.

—A report on high school salaries made by a committee at Cincinnati, Ohio, shows that that city pays the lowest minimum of cities having a population of 400,000 and over. The report, which is framed by William Von der Halben, recommends a minimum of \$1,800, a maximum of \$4,000, and a yearly increment of \$200.

—East Longmeadow, Mass. The school board has adopted a salary schedule in which all increases are contingent upon satisfactory work.

The minimum requirement for an appointment as a teacher is graduation from a standard two-year normal course. Normal school graduates, without experience, will receive \$1,000 for the first year's service, followed by two annual increases of \$100, and later by six annual increases of \$50 to a maximum of \$1,500.

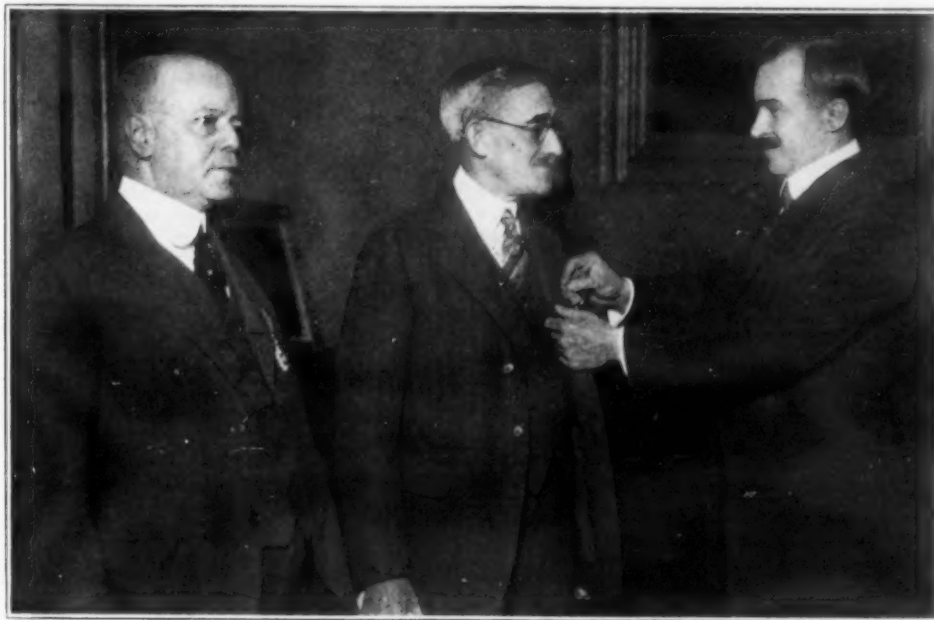
Principals will receive a minimum salary of \$1,600, one annual increase of \$100, and six annual increases of \$50 to a maximum of \$2,000.

In fixing the salaries of new teachers, \$100 will be allowed for the first, and \$50 for each additional year of successful teaching, up to a maximum of \$1,400. Teachers appointed at \$1,100 will be eligible for an increase of \$100 for the second year of service.

Principals and teachers now in service will be

given annual increases of \$100 until they have reached the maximums to which they would be entitled had the schedule been effective from the date of appointment.

Teachers not graduates of normal schools will be eligible to increase upon the presentation of satisfactory certificates received for professional courses of study.



RYAN REELECTED PRESIDENT.

George J. Ryan was elected president of the New York City board of education for the fifth term. Samuel Stern was elected vice-president.

The task of presiding over the school system of Greater New York is a strenuous one. The board of education not only deals in large figures, but the situations that arise daily and must be determined upon are numerous and perplexing. The school system with its army of teachers and a million pupils is well officered, but the board of education must see to it that the organization is kept upon the highest basis of efficiency and that the march of progress is constantly going forward. The president, as a rule, carries the larger part of the burden.

President Ryan is a modest, unassuming gentleman who applies himself with earnestness and fidelity to the great task that is upon him. He is tactful and judicious, in everything that he says and does, and his leadership as an administrator is unquestioned. The board of education is an efficient working unit, that wastes no time over superfluous discussion and wrangling, and that devotes itself to the duties assigned to that body. It recognizes Mr. Ryan as an executive who guides the administrative labors of this gigantic school system with a safe hand, and with an unselfish devotion to the million children in its charge.

Mr. Ryan not only enjoys the confidence of the constituency of New York City, but is appreciated by some of the foreign countries. In January he was decorated by the Belgian government for his altruistic attitude towards its people. The above illustration shows the Belgian representative in the act of conferring a decoration upon Mr. Ryan. The gentleman to the left is Dr. William J. O'Shea, superintendent of the Greater New York schools.

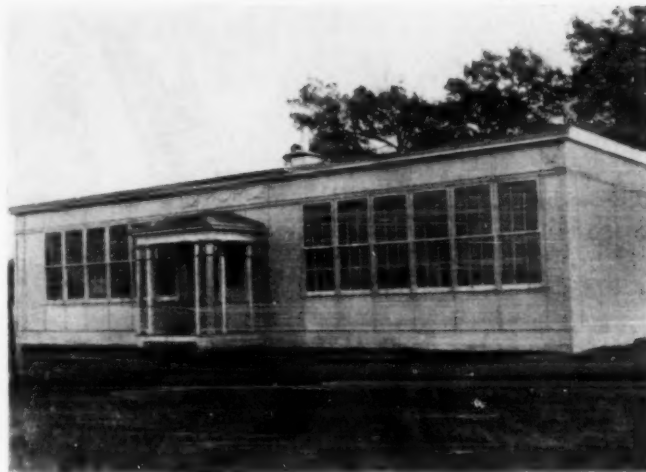
FOUR GOOD REASONS

Whenever your conditions call for portable housing, you should look into the distinctive advantages provided by the AMERICAN PORTABLE SCHOOLS.

Note these distinguishing features of American Portable construction

1. **Austral windows:** easy to operate — good ventilation without draft; fullest amount of unidirectional light.
2. **Insulite wall board:** same insulation as 5 layers of plaster—strong, durable, not affected by moisture.
3. **Twelve foot walls:** all buildings with flat ceilings, giving good light, neat appearance and plenty of air.
4. **Two types of roofs:** flat roof with parapet wall and gable roof.

Built in units of one to twenty rooms—in the most practical and convenient arrangements.



Two Room Portable School—Flat Roof Type

Easy to Erect—Easy to Move

American Portable Schools are safe, durable and comfortable. They are strongly built and attractive—pleasing patrons, pupils and teachers.

Their convenience and economy have led to their adoption by hundreds of schools. If you haven't received the new two-color, illustrated catalog for 1926, send for your copy, today.



Two 2 Room Gable Roof Units

AMERICAN PORTABLE HOUSE CO.

601 Alaska St.

SEATTLE,

WASHINGTON

—The name of the Michigan Teachers' Association has been changed to the Michigan Educational Association. The old name was believed too limited in scope and it failed to reflect the real objects and work of the organization.

—Bridgeport, Conn. Teachers who marry in the future will terminate their teaching service automatically, under a new rule adopted by the school board.

—Sandpoint, Ida. The school board has reaffirmed its policy not to employ married women teachers when contracts expire.

—Buena, Wash. Under new rules of the school board a teacher who marries during the life of her contract annuls its provisions. Previous to marriage, a teacher must give the board thirty days' notice on the penalty of forfeiting a month's salary.

—New Bedford, Mass. The school board has revised its rules governing the terms and conditions of the appointment of teachers. Under the rules subsequent marriage of a teacher automatically constitutes a resignation of the position, to take effect at the close of the current term.

—Dayton, Wash. The school board has adopted a salary schedule which provides a minimum of \$120 for grade teachers, with increases of \$5 a month until the maximum of \$140 is reached. In the high school, the minimum will be \$140, with increases up to \$160.

—Chicopee, Mass. The school board has adopted a salary schedule which goes into effect September first. Teachers who have served in the schools for seven years will receive increases of \$100 up to a maximum of \$1,600. Junior high school women teachers start with a salary of \$1,100, and work up to a maximum of \$1,700 in seven years. The senior high maximum is \$2,100. The opportunity teachers' maximum is \$1,700, the first-year salary being \$1,300.

—Auburn, Me. Thirty-seven teachers in the schools have been given salary increases ranging from \$50 to \$200.

—Providence, R. I. Supt. I. O. Winslow has presented a resolution to the school board asking that the salaries of school employees be increased to a total of \$100,000. He proposes to increase the maximum of primary and grammar

teachers \$50 a year, and that of a group of teachers in special work \$100 a year. Under the plan outlined, the basic maximum will be increased for certain teachers and principals. It removes certain restrictions which enable others to attain the maximum salary for their class sooner than under the present plan.

—Superior, Wis. The present rule of ten days' leave of absence for illness has been changed to allow seven days' absence for sickness or other causes, such absence to be cumulative from year to year.

—Bellingham, Wash. The school board has denied an extension of the five-day sick leave to twenty days. It was voted that travel be counted in lieu of summer attendance at a university or teacher training school.

—Cheyenne, Wyo. The elevation of teaching standards in Wyoming schools has been effected by the state board of education. The teachers' certificate granted to high school graduates with one summer term of work, has been abolished. The certification age in 1927 will be raised from 17 to 19 years of age.

—Providence, R. I. The school board has been asked to approve an amendment to the rules, providing half-pay for teachers absent on account of illness over a graded period.

In each case, the teacher must furnish a certificate from the superintendent for a period of absence not exceeding five successive school days, or from a physician for a longer period, stating that the absence has been necessary on account of illness.

The amendment further provides: "The superintendent may grant leave of absence to any teacher without pay for a period not exceeding one year; with one-half pay for a period not exceeding two days in any payroll month, for other reasons than personal illness.

"With pay for one-half day in each term or one day in each year for visiting such schools as may be designated by the assistant superintendent or director in charge.

"With pay for a period not exceeding five school days, or for a longer period with the approval of the school committee, for the purpose of making investigations for the welfare of the schools.

"A teacher may be absent from school for three days without loss of salary in case of the

death of a father, mother, brother, sister, husband, wife or child or any other relative with whom the teacher may then be living.

"There shall be no loss of salary when a teacher is subject to quarantine by order of the health department, or is summoned to court in connection with a case relating to public school affairs."

—Topeka, Kans. Rules and regulations governing teachers have been adopted by the board of education. A contract form for teachers has been adopted for use during the next year.

—St. Maries, Ida. The school board has passed a rule to the effect that no married women may be employed as teachers, beginning with the school year 1926-1927.

—Bluffton, Ind. Eight married women in the schools will lose their positions at the close of the present year, due to a ruling that no married women may be employed.

—Trenton, Mo. The school board has ruled that married women may not be employed as teachers. Exceptions are made in the case of widows, or woman having in charge the sole support of a family.

—South Bend, Ind. Married women were not considered by the school board in making appointments for the year 1926-1927. Applications from married teachers have been placed on file, and they will be appointed as substitutes to serve in temporary vacancies.

—White Plains, N. Y. As the result of an editorial called "The Morale of the School—Is It Breaking Down?" published last February in "The Orange", a student paper of the high schools, five members of the high school faculty have been dropped from the staff. The five teachers will leave at the end of the year, not having received reappointment at the hands of the administrative department. The editorial charged that the student body was demoralized and that the present graduating class is the poorest in years. The editorial caused much criticism of conditions at the school.

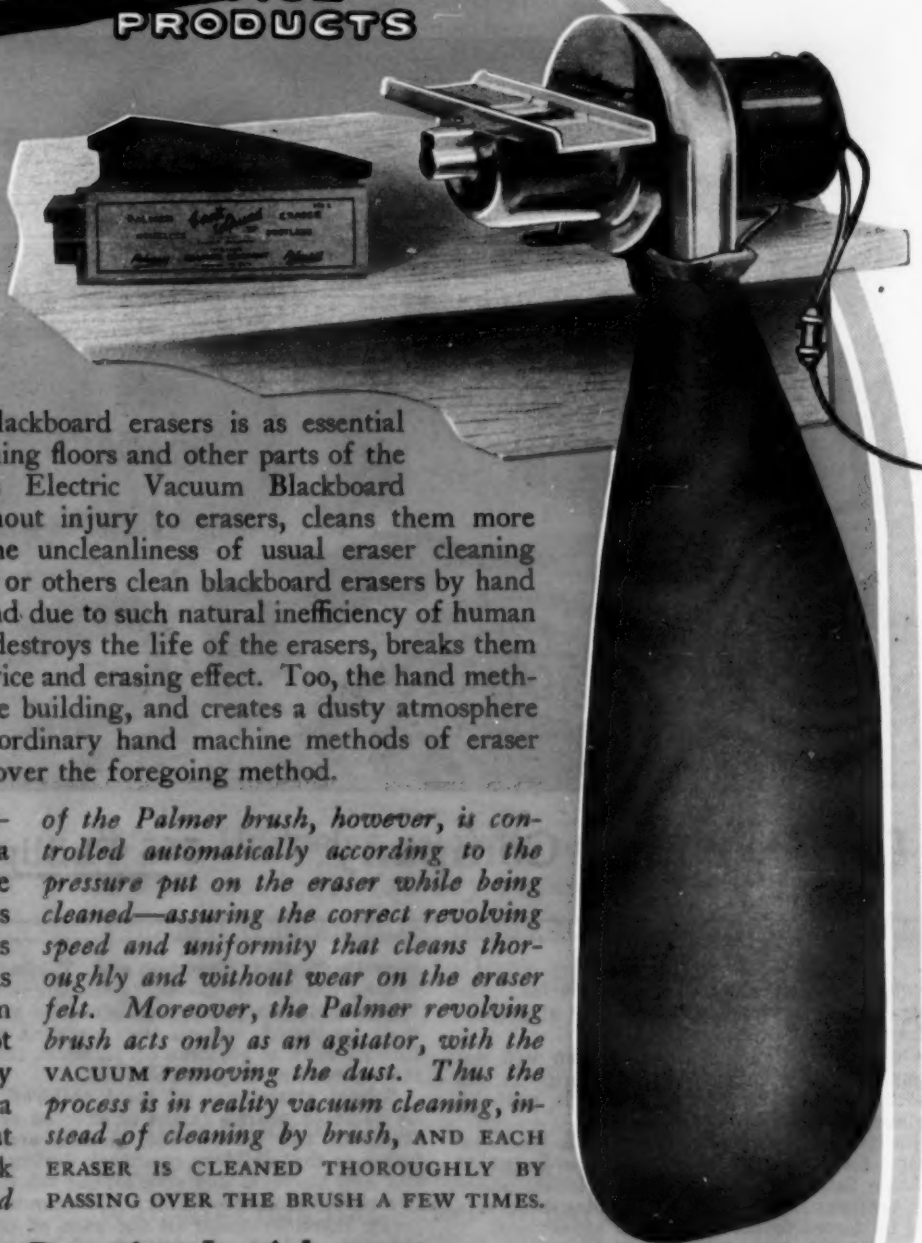
—Grand Rapids, Mich. In the appointment of teachers the school board has adopted a policy not to enter into contract with teachers who are married. At the end of each semester, women teachers who have married before the expiration of their contracts will be placed on

(Concluded on Page 128)

Palmer

MULTI-SERVICE PRODUCTS

Electric Vacuum Blackboard Eraser Cleaner



THE proper means of cleaning blackboard erasers is as essential today as the proper means of cleaning floors and other parts of the school building. And Palmer's Electric Vacuum Blackboard Eraser Cleaner cleans thoroughly without injury to erasers, cleans them more quickly than by hand and eliminates the uncleanness of usual eraser cleaning methods. Having the school children or others clean blackboard erasers by hand is not at all thorough: in the process and due to such natural inefficiency of human hands. Also, the hand method used destroys the life of the erasers, breaks them and thus decreases their length of service and erasing effect. Too, the hand method frequently reverted to disfigures the building, and creates a dusty atmosphere which is seriously insanitary. While ordinary hand machine methods of eraser cleaning are hardly any improvement over the foregoing method.

PALMER'S Electric Vacuum Blackboard Eraser Cleaner contains a brush of best grade of bristle, wire drawn, which REVOLVES and beats against the eraser felt as the eraser is passed over the vacuum opening. As chalk is very difficult to remove from felt, a stationary cleaning brush does not clean thoroughly: while the ordinary rotating brush operating at too great a speed is likewise inefficient, wears out the eraser felt, and throws the chalk dust into the air. *The revolving speed*

of the Palmer brush, however, is controlled automatically according to the pressure put on the eraser while being cleaned—assuring the correct revolving speed and uniformity that cleans thoroughly and without wear on the eraser felt. Moreover, the Palmer revolving brush acts only as an agitator, with the VACUUM removing the dust. Thus the process is in reality vacuum cleaning, instead of cleaning by brush, AND EACH ERASER IS CLEANED THOROUGHLY BY PASSING OVER THE BRUSH A FEW TIMES.

Interesting Highlights Denoting Its Advantages

1. In addition to being neat, compact and practical, the design of the Palmer Electric Eraser Cleaner is based on the established principles of cleaning by vacuum, assuring maximum efficiency with minimum consumption of power.

2. The action of the Palmer brush does not throw the dust into the air as with some revolving or rotating brushes. This is due to the position of the brush and

the additional vacuum slot provided. The brush will give indefinite service, and is inexpensively and readily replaced.

3. The Dust Bag is so designed that a large opening—in fact the full end of the bag—permits of emptying the contents quickly and easily.

4. The Motor is of a special Palmer design, so constructed that it will meet the requirements of an eraser vacuum cleaner and will not be a source of annoyance and trouble during its life. And the friction drive on the motor does not permit the pressure of the eraser on the brush to overload the motor,

insuring long and continuous, satisfactory service from the motor.

5. Cleaner is readily attached to the front edge of a table or shelf, permitting of convenient height for operation and plenty of table space for handling the erasers.

System to Follow

6. The Palmer Vacuum Cleaner provides a convenient and quick way of cleaning blackboard erasers mechanically—which can be done by the janitor; and if double sets of erasers are provided for the schools, the janitor can collect the erasers from the rooms one day, immediately replacing them with fresh ones—and then clean the

soiled erasers at his leisure, using them in replacing the others the following day.

Palmer's Vacuum Cleaner Is Being Used With Perfect Satisfaction—In Labor Relief, Results and Eraser Economy—By Schools in Many Parts of America: And in Design Construction, Purpose, Process and All of the Valuable Advantages It Furnishes, Should Be in Every School Using Blackboard Erasers.

Packed individually
in corrugated shipping
carton. Dozen in shipping case.

Shipping Weight—
Singly—8 lbs.
Dozen—80 lbs.

PALMER CO.

Manufacturers for the Jobber
Milwaukee, USA.

Paint More Rooms with Your Present Appropriation



RESULTS produced on a wide variety of school work, over a period of years, show that painting with DeVilbiss spray-painting equipment insures not only an improvement in the quality of the work but also an appreciable lowering of the cost. Maintenance funds are made to go further.

Painting with the

DeVilbiss
Spray-painting System

one man does the work of four to five brush painters—saving up to 80% in labor cost alone. There is no dripping and spattering of paint to clean up; there is less scaffolding required to move about—giving an additional saving in time. In many cases, less paint is used to accomplish best quality results—effecting a still further saving.

Painting this modern and improved way will enable you to paint more rooms with your present appropriation. Let us mail you the interesting operation and equipment facts of the DeVilbiss System. Address—

The DeVilbiss Company

268 Phillips Ave.

Toledo, Ohio

(Concluded from Page 126)

the substitute list with substitute salaries. The ruling does not affect married women at present on the teaching staff.

—Dowagiac, Mich. Married women will not be employed as teachers in the future. It has been decided not to renew contracts held by married women teachers.

—Bay City, Mich. In adopting a teachers' contract form for the next year, the board of education failed to incorporate a clause, under which teachers marrying after signing contracts would be forced to terminate the agreement.

The contract, as adopted, requires that the teacher abide by the rules of the board and that she be subject to suspension and dismissal for any cause deemed sufficient and determined by a two-thirds' vote of the board members.

—Edward W. Stitt, associate superintendent of the New York City schools recently stated that there were too many different teacher organizations in that city. He added: "If the separate organizations are established for the sake of improving pedagogic conditions they are to be encouraged, but it frequently happens that each separate teachers' organization is continued very largely as a means of securing a salary increase for that special group or so that special rights and privileges may be granted them. Instead of there being a citywide spirit of comradeship there is developed a group of clannish spirit which lacks professional dignity. Efforts should be made to have all the principals, teachers and supervisory officers unite in one citywide organization."

—The six parent-teacher associations at Tiffin, O., are considered unique. Not one of them has ever had a woman as president. About fifty per cent of the membership are men.

SCHOOL ATTENDANCE IN PACIFIC COAST REGION

—The Children's Bureau of the U. S. Department of Labor has issued a report on working children who "follow the fruit" in the north Pacific coast region. Nearly two thousand children were studied by the bureau.

The report brings out that from one-third to two-thirds of the children under 16 years of age enrolled in the schools of the berry district of the Puyallup Valley, Washington, and the orchard and hop-raising districts of the Wil-

liamette Valley, Oregon, and Yakima Valley, Wash., worked on farms. Children working on Washington and Oregon farms do not go to work so young, nor do they do such varied or difficult work as children on farms in the eastern states, nor are they so retarded.

School attendance of local children working on home or nearby farms is affected very little. Many of the local school boards arrange the terms so that children can work during the fruit and hop harvests and still attend school the entire period it is in session. Attendance is necessarily more irregular in the case of migratory children, and the percentage of retardation is considerably higher for the children who "follow the fruit" from state to state, either to work or to accompany adult members of the family whose school attendance is of necessity irregular. The percentage of retardation for some of these children was more than twice the average among city school children.

TEACHERS AID IN TEXTBOOK SELECTION

The school authorities of Cincinnati, Ohio, have adopted a method whereby the judgment of the teachers through an organized plan is brought into service in the selection of textbooks. Superintendent Randall J. Condon, in announcing the plan, says: "Publishers' representatives are at liberty to call on members of the committees at their respective schools, at such times as the teachers may have to give, when they are not engaged in teaching or other school duties. Representatives are requested to see the principal first to find out if it will be convenient for them to call upon the teacher in question. Generally, interviews should take place before or after school hours, in order that the regular work of the schools may not be broken into. Representatives are also requested not to make more calls than is actually necessary to properly present the merits of their publications. While it is not necessary to call at the Superintendent's office, publishers' representatives are always welcome, and any information which we feel at liberty to give to one will be given to all."

"We are trying in Cincinnati to select textbooks absolutely upon the basis of merit and to give such study to the subject as will make us aware of that merit. In this study, we receive the representatives of publishers in a cordial and

friendly spirit and welcome such information upon the merits of their respective publications as they may have to offer."

THE SCHOOLS OF NEW YORK STATE

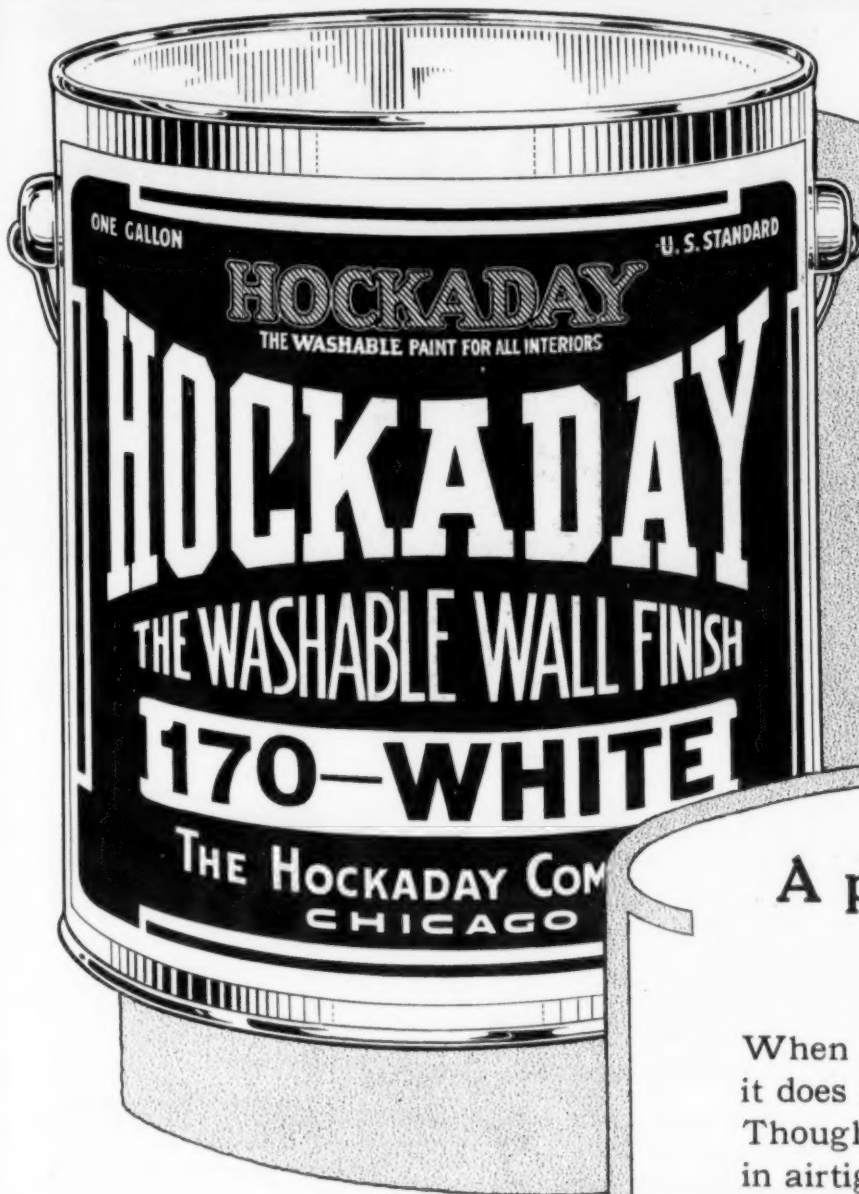
The schools of New York State care for 1,909,193 pupils and employ 67,658 teachers. The number of schoolhouses maintained is 11,828 and the value of school property is estimated at \$431,005,799. The annual cost of running the schools in the cities is \$194,042,790, in the towns \$50,511,295, in the state as a whole \$250,553,766.

These figures appear in the report for 1924 covering 717 pages issued by the state department of education. Commissioner Frank P. Graves points out that the two fundamental difficulties, namely financial relief for cities and the equalization of the tax burden in the rural districts have not as yet been solved. The need for a solution is more pressing now than ever. Cities having a population of over 100,000 are restricted to a 2 per cent tax limitation. The poorer rural districts are too meagerly supported. State support must become more adequate.

Dr. Graves also calls for an amendment to the state laws which will give the rural school superintendent the right to nominate the teachers as this is done in the cities. "For the sake of the schools" he says, "the position of these superintendents should be placed upon a professional basis."

—William J. O'Shea, superintendent of the New York city schools, suggests that classes of slow pupils be kept down to smaller registers than the average, while bright pupils be concentrated in relatively large classes. He goes to some length to discuss the relative difficulties of the teachers of bright and dull children, taking issue with the theory that the teacher of the slow class has much the heavier burden.

—The Geneseo, Ill., high school board proposes to suppress hazing among the students. "Hazing is the kindergarten of mob violence," said Dr. Arthur Parsons, president of the board. "Enthusiasm and fight are all right but the students should fight as a school for some worthwhile objective, not among themselves in inter-class or factional brawls. One of the foremost purposes of athletic and forensic contests is to provide an outlet for that spirit of fight and to satisfy students' ambition for supremacy."



The WALLMARK of Quality

**A paint you can forget,
but don't!**

When Hockaday paint leaves the factory, it does not leave factory supervision. No sir! Though it is shipped away to distant cities in airtight cans, we follow and make sure of a good paint job.

But—

When Hockaday has been applied, when, according to our specifications, it is on the wall and has hardened with a smooth, egg-shell surface, we forget it!

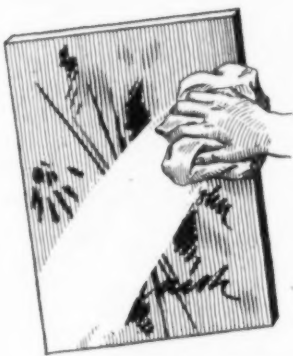
The story from there on is an old one to us. We know how through the years it will retain its freshness, how with each washing it will shine out again like new, how it will resist limeburn, checking, cracking and peeling.

Yes, sir, Hockaday is a paint you CAN forget, but one you don't! Only time does.

THE HOCKADAY COMPANY
1823-1829 Carroll Avenue, Chicago

HOCKADAY

THE WASHABLE PAINT FOR ALL INTERIORS



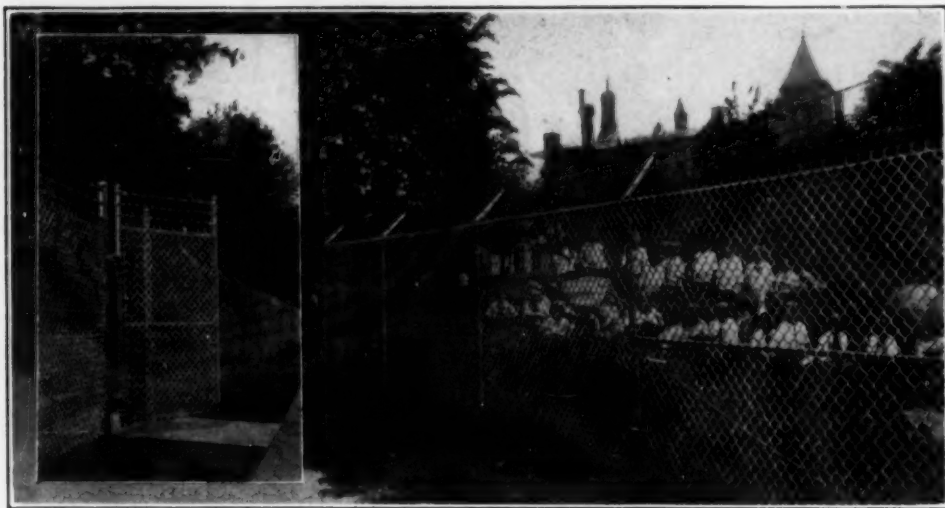
Our salesman proves Hockaday's washability. He scratches matches on it, douses it with ink, marks it with indelible pencils, then easily removes all trace of the smudge. This durability makes it proof against limeburn, checking, cracking and peeling. Ask to be shown.

SCHOOL



PLAYGROUND

Build it to Last!



THINK of your new fence in terms of years of service—not cost alone.

It pays to buy **quality** in fencing. Just as you build with brick for permanence, you should choose your school-yard and athletic field fence for its lasting qualities. Stewart-Afco Chain Link Fence is built on an extra-heavy framework, set in concrete post footings, and hung with fabric

woven of copper-bearing steel wire and **galvanized after weaving**. Structurally it is the most enduring type of wire fence so far developed.

Let us estimate on your requirements and submit a detailed specification which will enable you to gauge its super-strength and time resisting qualities. Catalog will be sent you, gladly, on request.

We also manufacture Wrought Iron Fences and Entrance Gates for Schools and Institutions—and will gladly send our "Iron Fence Catalog" if you wish it.

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ENCLOSURES

SCHOOL ADMINISTRATION NOTES

—The board of education of Trenton, N. J. has decided to release the pupils one hour a week for the purpose of receiving religious instruction. The action was taken on recommendation of Superintendent William J. Bickett. A committee of the board consisting of President John P. Dullard, Robert Messler, and Rev. William A. Wherry will work out the details of the plan.

—After considerable public discussion, dancing has been restored at the high school of Meriden, Conn. The Cooperation of the school authorities and the parents has been assured in maintaining proper decorum.

—A most successful summer school was conducted last summer at Oil City, Pa., under the direction of Supt. Leroy Weller. The school enrollment was over two hundred and the work covered grades three to eight, inclusive.

The school was of assistance to three classes of pupils, namely, those who had failed of promotion and wished to make up work in order to be promoted; those who had failed in arithmetic and who were desirous of obtaining sufficient knowledge to pass the examination in that subject; and those who had passed but were weak in certain subjects. A few who had passed their grades came to familiarize themselves with the work of the next grade, in order that their work might be easier the succeeding year.

The instructors were from the regular teaching staff and they were paid on the basis of the annual salary. The school was in session from eight o'clock in the morning to 12:30 in the afternoon and four teachers did all the work.

—"Professional preparation is as necessary for teachers as it is for doctors, lawyers, or ministers," says Superintendent Paul Dillingham of Falmouth, Mass., in his annual report. "How much more necessary is it than to have those who deal with the minds and characters of children, specifically trained for the work." Mr. Dillingham enumerates the accomplishments of the school system and then makes his recommendations which include a full-time nurse, a more efficient follow-up system for truancy cases, and facilities for hot lunches in some of the schools. The school committee consists of Rawson C. Jenkins, chairman; Henry G. Haddon, secretary; Dr. A. L. Pattee, Mrs. Virtue B. Gifford, James Nicol, and Dr. Karl A. Bohaker.

—Salt Lake City, Utah. The total budget expenditures for the ensuing year amount to \$2,689,000, which includes an addition of \$36,000 for the purchase of additional school grounds. The tax levy for school purposes this year is 8.6 mills, or an increase of 0.5 of a mill over the preceding year.

—Boston, Mass. Expenditures totaling \$1,073,557, showing the cost of public schools for the month of March, have been presented to the board of education by Mr. A. M. Sullivan, business manager of the board. It will be the future policy of the business department to submit monthly reports to the board.

—The March number of the School Board Journal contained a table showing the per capita school costs in the larger cities of the United States which had been compiled by the Philadelphia board of education. The table shows the per capita cost of Boston to be \$120.34. The Boston school authorities hold that this figure is incorrect. The earlier computation included items which do not belong there. The corrected figure is \$89.06.

—Tacoma, Wash. Drastic changes ordered by the school board in the method of operating the public schools will result in a saving of nearly \$55,000 for the next year. The largest saving is in the high school where a seven-period day will be in effect. This means that fifteen less teachers will be needed and that a

subsequent saving of from \$26,000 to \$27,000 will be effected.

Increasing the number of recitation periods and increasing the number of pupils per class will not injure the standings of students preparing for college, according to Supt. Wm. F. Geiger.

—Bellingham, Wash. The school board has planned the establishment of a summer school for pupils of the sixth, seventh, and eighth grades. The cost of operation of the school is estimated at less than \$1,300.

—Superior, Wis. The school board has adopted a recommendation that pupils admitted to the first grade at the opening of the fall term must be 6 years or over by January first. No pupils will be admitted at the beginning of the second semester.

—Okanogan, Wash. Struck with the inconsistency of pledging allegiance to the flag when none is provided on the school grounds, the pupils of the College Flat school went on strike. "We are leaving school until the flag is flown from our flag staff," the pupils announced in a written statement to County Supt. E. B. Grinnell. It appears the school flag had become too worn for use and the flag pole had blown down. The requests of the pupils for replacement were unheeded, and they deemed the strike a merited manner of asserting their patriotism.

—That the public schools of Helena, Montana, need radical improvement is the contention of the Record of that city. This newspaper holds that the high school was built to house 250 pupils while it is housing 500. It says further: "There is also overcrowding of classrooms in the grades, and an overloading of grade teachers. Thirty or thirty-five pupils is the maximum number that a teacher is able to effectively teach. Beyond that number the efficiency of the over-burdened teacher begins to fall. In some rooms in the Helena schools there are 50 pupils. It is plain to be seen that the parts of a school system must all make an efficient standard if the machine as an entirety is to

(Continued on Page 133)

Crane Technical High School and Junior College

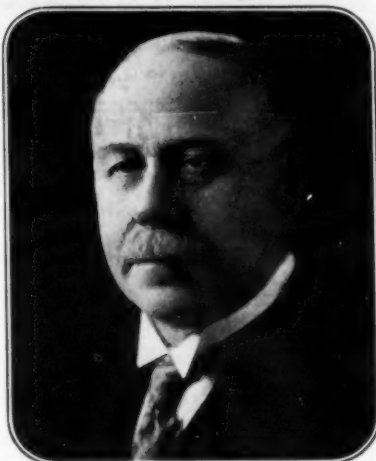


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March 2, 1926.

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Very truly yours,

W. J. Bartholf
Principal, Crane High School,
President, Crane Junior College.

(Continued from Page 130)

reach satisfactory results. The benefits of a modern building and the latest equipment are practically annulled by the overcrowding of rooms and the overburdening of teachers."

"The platoon plan of elementary school organization seems to me to be opposed to the application of the best we know of some of the more basic principles of education, psychology, and teaching," said Prof. Frederick G. Bonser, of Columbia University recently. "Furthermore, almost every virtue claimed for the platoon plan, aside from that of economy in cost, may be realized by schools not using this plan."

"The school committee should confine its entire efforts to questions of policy and leave to its general manager, or superintendent, the execution of that policy," said President William L. Sweet, of the Providence, R. I., school committee. "The function of the school member was quoted as voting against the plan for a business manager because he did not know who was to get the place, and he must know the man before voting for the job. That is unsound. It is the business of the school board to create the job, define the duties, and then find a man who can measure up to the task. No business in the world hires its men, and then finds things for them to do, according to their qualifications."

A 32 per cent increase in average daily attendance of school children in New York State is reported by the state education department. The figures are based on the net enrollment of all the state's public schools. The report shows that the attendance for last year was higher than ever before, the average for the school year ending last year being 86.43 per cent. New York City's average attendance is well above 90 per cent.

According to Dr. James D. Sullivan, director of the compulsory attendance division of the state, the substantial increase in the per cent of attendance to enrollment is proof of the substantial progress made in daily regularity of school attendance during the year.

The gain in high attendance is beyond that attained in any other school year, at least since the compulsory education law was enacted. During the world war the regularity of attendance declined. Shortly afterward, the schools began to recover lost ground, and the increase

has advanced far beyond that attained in the year 1913-1914.

Credit for the wonderful advance made in increased regularity of attendance has been given to the group of faithful, efficient administrators, superintendents, school boards, teachers and attendance officers in the several school systems throughout the state.

—Minneapolis, Minn. The operation of the schools in 1927 will cost about \$7,574,000, which is \$241,934 more than the total spent for 1926. Miscellaneous revenues, which include \$150,000 carried over from 1926, total slightly more than \$1,000,000, and reduce the amount to be raised by taxation, to \$6,460,126. The rate as estimated will be 20.6 mills, the same as for 1926, and one-tenth of one mill less than for 1925.

—Cumberland, Md. The board of education has presented a tentative budget for school purposes for the year. The amount asked for is \$657,123, which is divided among instruction, operation of school plant, maintenance of school plant, auxiliary agencies, tuition for students, and fixed charges.

—Mercer, Pa. A test case on the Troy plan of financing a school building in Mercer will be tried in the Common Pleas court of Mercer County. The plan in operation in Troy involves the organization of a holding company who sell bonds and erect a school building for which the board pays a rental.

—Erie, Pa. With a deficit of \$49,259 still on hand, the school board is reducing expenses to meet a fourteen-mill levy for the year 1926-1927. Reductions in funds have so far totaled \$62,837, with further decreases still a possibility.

—Elgin, Ill. Out of 46 Illinois cities with a population of 10,000 or more, Elgin ranks 36th in the size of its 1925 school tax rate. Elgin's tax rate for 1925 was \$3.17, while the highest tax rates among the 46 cities was \$8. The lowest was \$2.72, paid in Rockford.

Both East Aurora and West Aurora levied higher school tax rates last year than Elgin, the former's rate being \$3.45, while West Aurora's was \$3.25. Joliet's rate was \$5.50; Oak Park, \$5.69; Evanston, \$6.35; La Grange, \$6.75; Freeport, \$3; Bloomington, \$2.75, and Peoria, \$2.75.

—Thirty-nine cities have a school tax rate above Bloomington and Peoria, according to the

report, and these rates range from slightly in excess of \$2.75 to \$3.85 at Decatur, \$4 at Mattoon, \$4.74 at Collinsville, \$5.50 at Joliet, \$6.35 at Evanston, \$7 at Waukegan, and \$8 at Maywood and Forest Park.

Bloomington stands with fourteen other cities having a \$2 school rate or less for educational purposes. The city is classed with fifteen others with a building rate of \$0.75 or less.

—Wichita, Kans. A survey of conditions facing the city has revealed that the proposed building budget for the next ten years may be met without issuing a single bond. Instead of having to erect a high school plant for the whole city, only additional buildings for increases in school population are needed.

The building program calls for an expenditure of \$3,134,000 which is to cover the next ten years. With a few changes the program has been made to fit the amount available for building purposes.

—Keene, N. H. The board of education has adopted a budget of \$202,863 for the coming school year. The cost per pupil has been maintained at considerably less than the average for the other cities of the state without sacrifice in efficiency. The total valuation amounts to \$567,495 and the total bonded indebtedness of the district is \$160,000.

—Priest River, Ida. The school district has approved an additional seven mills for general school purposes.

—Laramie, Wyo. The school district will shortly vote on the proposition to vote \$150,000 in bonds for the remodeling of the east side building and for erecting the first units of a high school building.

—Nampa, Ida. An election will be held to vote an additional seven-mill levy for the support of the schools during the coming year.

—Chicago, Ill. A change in the law apportioning the state school fund among school districts has resulted in a decrease of \$22,347 for Chicago and Cook County as compared with the amount received in 1925. There is a reduction of \$300,000 over the amount received in 1924.

Previous to the amendment, the \$8,000,000 fund was apportioned according to children of school age population. Under the amendment, it is apportioned according to attendance and the grading of teachers as to individual qualifi-

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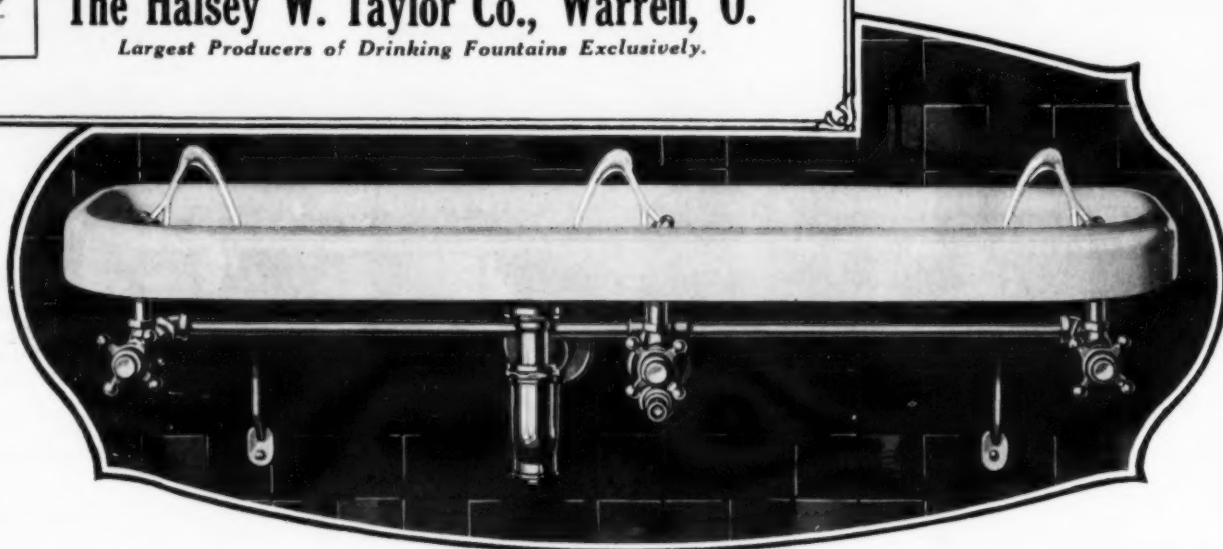
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cations. Chicago schools will receive this year \$2,788,634, and the tendency will hereafter be downward, because of the increase in the number of pupils to each teacher, which also keeps down the number of teachers.

—Spokane, Wash. The school board has adopted a budget calling for an expenditure of \$1,929,440. With an eleven-mill levy, the valuation of property in the district must be raised \$1,115,410 to a total of \$91,040,000 to produce the amount which must be raised by the district levy.

—After a conference among the fiscal leaders of New York state, it has been decided that legislation to carry into effect the recommendations of the governor's commission on school finance must be deferred until a more opportune time. A difficulty in the carrying out of the recommendations is the fact that it will require new taxes. The commission, in its report, has suggested a number of new revenue sources, among these the levying of a surtax on personal income.

The report of the Commission indicates a careful study of the problem, but does not indicate a satisfactory solution of it. The Commission proposes increasing the state aid for schools for the next fiscal year (1926-1927) by \$18,500,000 and to grant a further increase of \$5,500,000 for each of the succeeding years. This is to be added to the \$54,000,000 state aid for the same purpose provided for by the present law. To date, only one bill increasing the revenue of the state to meet expenditures has been presented, and that is the Mastick bill increasing the inheritance tax.

The Commission estimates that the increased revenue from this bill will eventually be \$7,200,000. This is considerably less than half the revenue required, and the revenue from this source during the fiscal year in which the appropriations must be made will not exceed \$4,000,000.

—Boston, Mass. The policy established by the business manager of awarding contracts for supplies, based on prices of individual items, instead of lump sum figures, has resulted in substantial savings in purchasing costs, varying from eight to 29 per cent in many items. The auditor has commended some changes in pay-

roll computations, of which there are about 14,000 for each quarter.

—Oklahoma City, Okla. The school board has adopted a budget calling for the raising of \$1,888,061 and a school levy of 14.9 mills. The new budget represents an increase of \$153,458 over that of last year.

—Tulsa, Okla. The budget of the school board has been reduced by \$180,000 for the next year. The greatest saving is in the amount asked for the construction of new buildings. A saving of \$49,400 is shown in the amount asked for teachers' salaries.

—Pontiac, Mich. The school board's budget for the next year has been increased by \$100,314 over that of last year.

—Bloomington, Ill. The expenses of the school system will be reduced by \$25,000 during the ensuing year. The largest department to be discontinued will be the kindergarten, which will mean a saving of \$10,000.

—Owensboro, Ky. The school board has adopted a budget calling for an expenditure of \$171,950.

—The school board of North Platte, Nebr., has passed a rule barring married students from the schools after September first. All students who marry while attending school will be excluded, and no married persons will be allowed to enroll.

—The school board of Norfolk, Nebr., has stated that in their opinion, a school board may not legally pass a rule restraining married students from attending the schools. They pointed out that marriage is not immoral nor a crime, and that the school laws provide free education for boys and girls between the ages of 7 and 21.

—St. Louis, Mo. The school board has been asked to approve an amendment of rule 26, relating to the care of buildings and movable property, textbooks, supplies and apparatus. The rule as amended, will read as follows:

"Section I. The Commissioner of School Buildings shall have charge of all buildings owned by the Board of Education and the grounds whereon such buildings are situated, and of all property movable and permanently affixed to such buildings and grounds.

"He shall be responsible for the care of all such buildings and grounds and of such property

both movable and affixed thereto, and he shall report to the Board from time to time what assistance he requires for such purposes.

"Care and responsibility for text and reference books, stationery, educational supplies and educational apparatus, as well as the arrangement of movable furniture within the classrooms, halls, corridors, offices and gymnasiums, shall be vested in the superintendent of instruction."

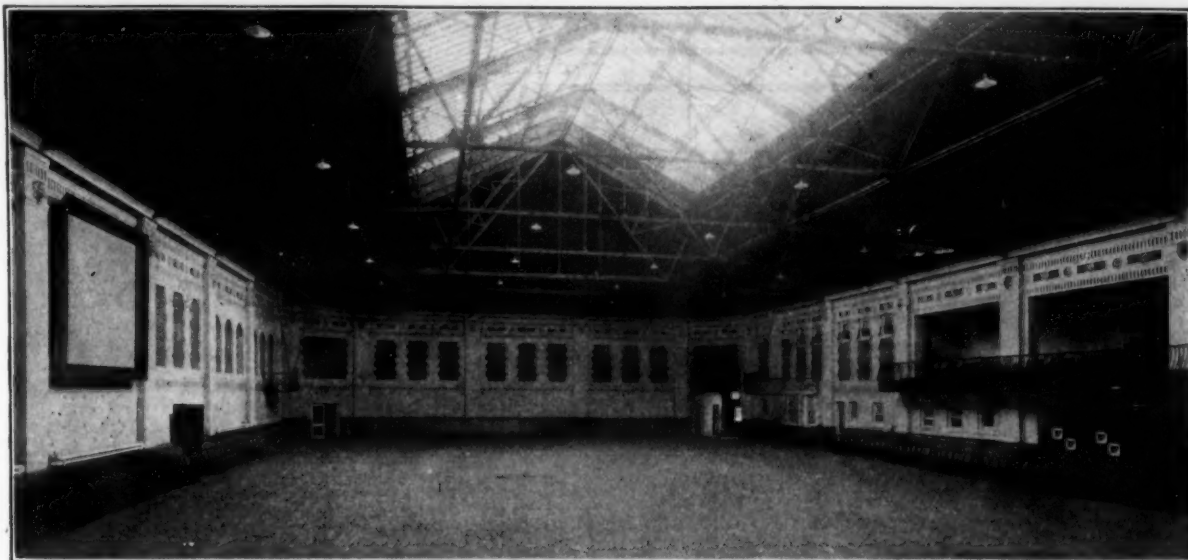
—The average attendance in the rural schools of Delaware has increased from 36 days per pupil to 133 days in the last six years, according to a study recently completed under the auspices of the State Board of Education. The increase is attributed to the establishment of a state school system with authority centered in the board of education to supervise attendance, to special efforts of teachers, and to the general movement throughout the state for better schools. Weather, illness, parental indifference, and agricultural and other forms of work were found to be the chief causes of absence.

—New York, N. Y. The executive committee of the Brooklyn Teachers' Association has adopted resolutions protesting against drives for funds in the schools and asking the board to bar all drives after September, 1926.

—New York, N. Y. Teachers who contemplate leaving the city on absence leave for restoration of health are hereafter required to undergo a physical examination by the medical staff of the department of education, or they must submit a physician's certificate. The rule was passed at the suggestion of Associate Supt. Edward B. Shallow, who recommended that the change in regulations be made in the pending revision of the by-laws.

SUMMER COURSES IN ADMINISTRATION

Teachers College, of Columbia University, has announced a summer course in school administration for the benefit of school business managers, secretaries of school boards, and other school business officials, as well as other school administrative officers interested in problems of school business administration. The instructors in the course will be Dr. N. L. Engelhardt, Mr. G. F. Womrath, assistant superintendent of schools, in charge of business affairs, Minneapolis, Minn., and G. W. Grill, clerk-treasurer of the board of education, Lakewood, O.



Gymnasium—Georgian Court College, Lakewood, N. J., a user of Sonneborn products. Contractor, H. A. Harris Construction Company of New York. Architect, Robert J. Reilly, also of New York.

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1. CEMENT FLOORS—It is a simple matter to make your concrete floors permanently wearproof and dustproof. A treatment of Lapidolith, the original concrete floor hardener, will do the trick. It is as easy to apply as water, and it will not interfere with the use of the floor.

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2. WOOD FLOORS—Lignophol is the preservative floor dressing that penetrates the wood fibres and restores the natural gum and oil. It prevents the splintering, rotting, or drying out of new floors and old as well. It gives you a smooth, dustless floor that will wear for years.

3. PAINTED SURFACES—School buildings demand a paint that is durable, washable, and stays white. Cemcoat is a gloss, eggshell or flat enamel paint that stays white long after other paints turn yellow. Fingerprints, ink stains, and pencil stains can be washed from its surface as easily as from tile. After repeated washings the painted surface still looks like new.

Cemcoat will not chip or peel. It adheres to plaster, concrete, or brick walls as easily as to wood. Generally, one less coat than usual is required because of the exceptionally heavy body of this paint. If you want cheerful, long-lasting interiors at a very low cost, be sure to get Cemcoat. It is made in whites and colors for either exteriors or interiors.

4. ROOFS—Roof leaks are an expensive nuisance—a nuisance and an expense that can be avoided by the use of Stormtight.

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Hydrocide Colorless is invisible. It does not detract from the natural beauty of the walls. It penetrates the surface of the brick, and forms an effective guard against any moisture reaching the interior. Since it contains no paraffin it will not run in hot weather.

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NEWS OF THE SCHOOL BOARDS

MR. EVERSULL APPOINTED

Mr. Frank L. Eversull, principal of the Woodward School, St. Louis, Mo., has been elected superintendent of schools at Bartlesville, Okla. Mr. Eversull's appointment followed an interesting meeting of the board of education, to which leading citizens of the community interested in education were invited.

At this gathering Mr. Eversull presented a formal discussion of "The Superintendent and His Job", and described in detail the duties of the superintendent as a community leader, as a leader of the board of education, and as a leader of the teaching staff. The address was a resume of the speaker's educational philosophy, which he hoped to carry into effect in the schools.

In discussing the superintendent as the leader of the board of education, Mr. Eversull said:

"Education has become a highly specialized calling. At one time it was thought that anyone who had finished a certain level of schooling was prepared to teach. With the advent of the scientific study of education, at the beginning of this century, the colleges of education began to add professional courses for supervisors and administrators. So rapidly has the body of professional knowledge grown that practically every university now confers the degree of Doctor of Philosophy upon the candidate who successfully pursues work in the allied fields of educational supervision and administration. This means that there is a type of training necessary for the execution of the duties which now fall upon the superintendent. When wisely and well selected upon the basis of personality, leadership qualities, experience, and training, he brings to a community a wealth of knowledge for the scientific administration of its school system. Granted that he has all of the qualities mentioned above it should naturally follow that he immediately becomes the educational leader of the board of education that employed him. As its leader he merits the unqualified support

of that body. No person can hope to make a success of any profession if he must put aside his professional knowledge and use his time and talents to fight petty battles of whims, prejudices, and personal likes or dislikes.

"As a trained professional man he should be guided by a code of ethics which his profession has adopted. He should have the support of the members of his board of education in all of his policies after they have been discussed and fully determined by the members thereof. His task is largely dependent upon his ability to sell the modern program of education to his people. But after it is once sold there should be no equivocation. His leadership should be acknowledged and heartily supported. Many of the failures in superintendencies can be directly laid to failure in matters of cooperation.

"The qualities of leadership are strengthened and deepened by increased contacts with the profession. The community and the board of education should require its acknowledged leader to attend, participate in, and report upon the educational meetings, school systems, and other meetings and organizations which relate directly or indirectly to his work as director of the educational policy of a system. There is no economy in a program which pauperizes the mind or stunts professional growth and vision. The values of comparison are too evident for discussion. The stimulus that comes from contact with leaders in other communities brings its returns a hundred-fold. With these opportunities the superintendent should grasp every opportunity to attend, address, and write for the larger bodies of professional men.

"If this program brings its fullest results then the superintendent will become what he should be—the actual head of the school system. His leadership, vision, training, and prestige should make him the person of trust and the individual of competence. This actual leadership should be unhampered by personal desire or political whim. The word "pull" should be an unknown term in his professional vocabulary. Merit should be the measure of worth and every good deed should be rewarded on that basis.

"In all these, his work should keep him in constant contact with his board of education.

Their wise advice and kindly counsel should direct him in all paths of useful service and their expanding vision of his worth to the schools and the community should constantly stimulate him to his best. But he can never be his best without the unqualified support of his board of education and through them, his staff, and his community.

"Thus the superintendent rises above the level of political chicanery and of personal prejudice. His work connects him with the schools on one hand, and with the community, on the other. His well ordered life, his desire to serve, and his confidence in his work and his people should be beacon lights to the higher levels of professional service and zeal."

Mr. Eversull's term will be three years, beginning with a salary of \$6,000, with annual increases.

AMONG BOARDS OF EDUCATION

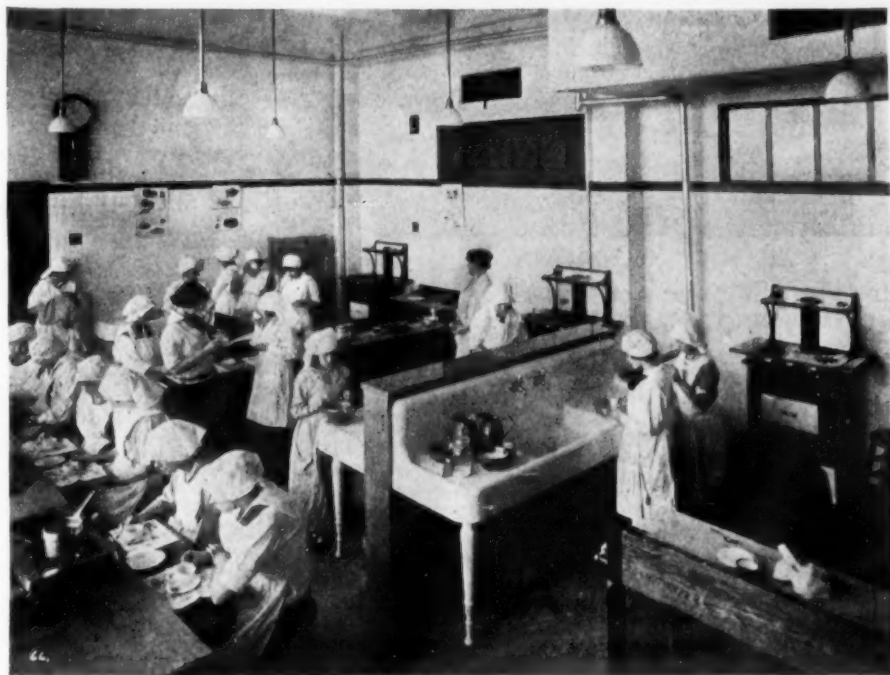
In a public address Dr. John L. Tildsley, district superintendent of New York City recently said: "I don't believe you can have a good school system unless you have a good board of education. Defects in teachers largely reflect the attitude of the members of the board of education, whose spirit runs through the entire system. It is not necessary for me to demonstrate this. The low morale of the teachers is caused by the low morale of the board of education. If we had a board of education composed of men who were themselves educated and knew what education means teaching in this city would become a profession in an amazingly short time."

—The Omaha, Nebr., board of education has voted down the proposal to employ a business manager by a vote of six to five. The matter was discussed for months and finally found its way into the courts. The board was temporarily enjoined by taxpayers from creating the position of business manager, but the court decided that the board was free to act.

—The board of education of West Point, Nebr., voted unanimously to strike out of the applications sent to prospective teachers, the question regarding their church affiliation. In comment on the action the Nebraska City Press says: "It is no more proper to ask an applicant

(Continued on Page 138)

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economy because replacements are unnecessary—repairs are eliminated and it saves time and work.

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neers will be glad to plan, without charge or obligation, an ideal installation for you. Be sure to show where the doors and windows are, and tell how many people are to be served at one time.

(Continued from Page 136)

for a teaching position whether she is a Methodist, a Christian Scientist, a Jew or a Catholic than it is proper to ask an applicant what she pays the tailor, or for what ailment, if any, the family physician is treating her."

—St. Louis, Mo. In addition to the increased educational activities of the board of education, there are now thirteen lunchrooms in operation in as many school centers. During the year ending June 30, 1925, the Lunchroom division of the supply department handled a business approximating \$310,000. This was an increase of practically \$220,000 over the year ending June 30, 1916. This has increased the responsibility and the work of certain members of the supply department to a marked degree.

—Kearney, Neb. The school board has been asked to devise and present to the city council for approval a system of traffic signals which will protect the lives of school children.

—Supt. John J. Maddox of St. Louis, Mo., has presented recommendations calling for the reorganization of the administrative functions of the department of instruction, which provides for the reassignment of three assistant superintendents, or an extension of the centralization of administration. Under the plan, the administrative duties of the offices will be placed in nine divisions, four of which are in existence, and five of which will be created.

Formerly, there have been four divisions in the superintendent's office for administrative affairs, including divisions for hygiene, vocational counseling, attendance and tests and measurements. Under the reorganization, these divisions will be augmented by five additional divisions, whose duties will be supervision of records and statistics, school and community relations, housing and equipment, books, supplies and curriculum revision, and personnel.

—Flint, Mich. Officers of the board of education will serve without salary during the coming year. The decision was made after it had been agreed to increase the salaries of teachers.

—Racine, Wis. The preparation of the report on the school system has been begun by Prof. A. S. Barr of the University of Wisconsin. It is expected that the report will be completed ready for distribution by September first.

—Seattle, Wash. The school board has been asked to settle two claims for damages, one for

\$10,000, the other amount unstated, for injuries suffered by two school children. One boy sustained a broken arm and shoulder in a fall while jumping over an athletic horse, and a girl had her foot broken by a piano toppling over when she tried to move it.

—The board of education of Detroit, Mich., has instructed the corporation counsel to begin legal action to test the constitutionality of the amended primary school law passed by the 1925 legislature. The amendment which becomes effective in August, would deprive Detroit of approximately \$250,000 of its share of this fund.

The contested amendment provides that five per cent of the primary school fund shall be distributed inversely in accordance with the assessed valuation of the districts. Under the old law, the fund was distributed to districts according to the school population.

—The board of education of Wilmington, Delaware, was criticized by the local labor union for employing Miss Rose Phillips, an expert on schoolhouse equipment, at an expense of \$300. In reply President Victor D. Washburn stated that the board will thereby save \$3,600 per annum in maintenance. He added: "The proper use of new buildings, the selection of just the right type of equipment, the installation of the best modern educational methods and the selection and placing of teaching and supervisory personnel are but a few of the problems which have been before the board for solution. They must be solved correctly if the taxpayers are to realize their hopes and desires for the school children of Wilmington."

—The Ada County, Idaho, schools held a convention at Boise. Verner L. Dotson spoke on the "State Wide Tax," and G. M. Shiels discussed the subject of "What a Teacher Has a Right to Expect of the Trustees." E. H. Coffin presided.

—In discussing the relations of the school committee and the superintendent the Lawrence, Mass., Telegram recently said that two things should be borne in mind.

—Mrs. Anna Roussel, a member of the Dayton, Ohio, board of education in a public address held that more emphasis should be placed upon adult education. In comment on Mrs. Roussel's

argument, the Dayton News says: "Why should not business and professional men who have made their stake drop out of the hard routine of business and study or travel? May we not look forward to the time when a man at fifty or even sixty will do a year's work in some technical or professional school?"

"One of these is to convey to the superintendent and the principals and the teachers the general public's views on the subject of the schools, what it hopes to receive from them in return for the money spent on them. The other is that the school committee shall cheerfully cooperate with the superintendent in putting into force the rules and regulations that his many years of successful service have convinced him are wise and salutary."

—St. Louis, Mo. The salary of Mr. C. L. Barr, assistant to the supply commissioner, has been fixed at \$5,000 per annum.

—Waltham, Mass. The citizens have protested to the school board against the sale of candy in the schools. The protest came from parents, physicians, and dentists, who cited the harmful effects which candy has on small children.

—Racine, Wis. The school board will shortly place in effect a recommendation of the survey experts providing for a continuous system of keeping the census. Under the continuous system, the attendance officer is in charge of the records and is delegated to keep a record of the transfers of students from one school to another, the moving of families, and the departure of others.

—Amboy, Ill. For purposes of economy, the office of superintendent has been discontinued. The work previously carried by the superintendent will be done by the principal and teachers.

—Saginaw, Mich. The board of education has approved a one-man administrative control of the school affairs. The board failed to approve a plan to place the professional phases of the school administration in the hands of the standing committees of the board.

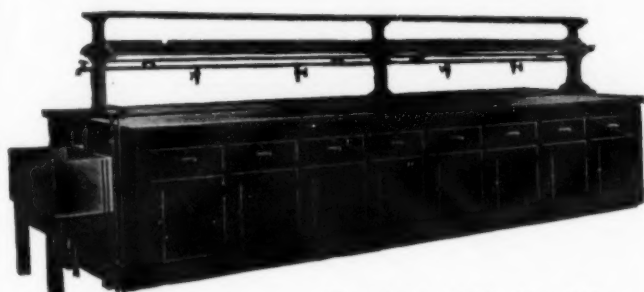
—Fond du Lac, Wis. The board of education has placed its recreation program upon a twelve-month basis.

(Concluded on Page 141)

Peterson Laboratory and Library Furniture



Charging Desk L-5140



Chemistry Table No. 940

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In the class room or in the laboratory, wherever quality counts you will find Peterson Furniture. Only those using it can appreciate the great care we have taken to meet the exacting demands of instructors, school officials, and expert chemists.

Every Peterson design is based upon a thorough knowledge and a full understanding of the actual conditions prevailing where the equipment is to be used. Each article is constructed by skilled craftsmen from selected materials. That is why Peterson Furniture gives so many years of satisfactory service. Quality does count, in furniture as in everything else.

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(Concluded from Page 138)

—An injunction suit has been brought against the Palmetto, Fla., board of education seeking to restrain that body from purchasing a tract of land from the local chapter of the Ku Klux Klan. The petition charges fraud and conspiracy on the part of both the school authorities and the klan. The controversy arose over the proposed purchase by the board of five acres of land from the klan for the erection of a grammar school building.

—New Haven, Conn. The school board has approved the adoption of a six-hour day for the commercial high school and the introduction of a supervised study plan. Each day under the plan will consist of six periods of 50 minutes each.

—Governor Pothier of Rhode Island has signed the Strayer bill for the reorganization of the Central Falls school board.

—Everett, Wash. The school board has given the school authorities permission to take any measures for curbing smoking among school boys on the campus and the vicinity.

—Washington, D. C. The board of education has adopted a resolution providing that non-resident pupils may not be accepted in the schools so long as the present congestion exists.

—Ralph R. McKee was reappointed a member of the New York City board of education by Mayor James J. Walker.

—Albert C. Rust who has served as a member of the Poughkeepsie, N. Y., board of education has been reappointed. "His intimate knowledge of the details of the work are so valuable that it would have been a serious mistake to have replaced him," says the Poughkeepsie News. The selection is an excellent example of an appointment on merit.

—The board of education of Oak Park, Ill., suspended 56 high school students for being members of a secret fraternity. George Harvey Jones, president of the board and M. R. McDaniel, superintendent, have decided to enforce the state law which forbids fraternities, sororities, and secret societies among students.

—The North Platte, Nebr., board of education has adopted a rule barring married students. In the opinion of Supt. H. B. Simon and President of the school board at Norfolk, the

action of the North Platte board is unconstitutional.

—The board of education of New York City has added an amendment to its rules under consideration which embody the following: "Principals, teachers and other assistants who are obliged to be absent from duty on account of illness shall not go to places remote from the city of New York or its vicinity for the recovery of health, treatment for illness, or other purposes affecting their mental or physical well-being without submitting to an examination by a medical examiner of the Board of Education or without submitting a physician's certificate satisfactory to the chief medical examiner of the board. Failure to comply with the terms of this subdivision shall be deemed insubordination."

—Erie, Pa. The school board has amended its rules governing the use of school buildings. The amended section reads:

School buildings, rooms, or any other school property may not be used at any time by organizations or individuals for corporate or private gain, except for such paid promotions as will create a civic uplift or meet a public need for wholesome pleasure or recreation; any such promotion receiving approval to be subject to the regulations and rentals determined and required by the school district.

—Chester, Pa. Opportunity schools for orthogenic classes and a special coaching school for pupils with individual difficulties have been inaugurated. Summer schools for elementary and high school pupils will be continued this summer. A cafeteria is installed in each school building.

—William H. Baker, who is both superintendent and secretary of the Rochester, N. H., school system reports that less than one half of the pupils who enter the first grade ever reach the high school. He notes that the high school per pupil cost in New Hampshire cities ranges from \$77.48 to \$193.91; elementary schools from \$58.71 to \$92.87. The Rochester schools are near the low cost mark. The school board consists of Hon. Elihu A. Corson, chairman, C. Garfield Hurd, Burton L. Spiller, Miles H. Dustin, William J. Stanton, Myron I. Jenness, Harry N. Lenfest, Mary C. Dewal, Albert J. Desjardines, Lillian F. Cooper, Harry

L. Sawyer, William A. Ricker, and Henry K. Dou.

—Malden, Mass. The school board has approved increases in salaries for teachers and janitors, which is dependent upon the appropriation of the necessary money in the city budget. The increase amounts to \$100 for each junior and senior high school teacher effective on September first, and \$100 one year later. Elementary teachers have been given \$100 more a year, and janitors a similar amount.

The schedule provides a maximum salary of \$2,600 for high school teachers after September, 1926, and \$2,700 after September, 1927. Instructors will be given \$1,900 the first year, and \$2,000 the following year.

Junior high school teachers now receiving \$1,600 will be given increases of \$200, the maximum to be reached by September, 1927. College or four-year normal graduates will receive a maximum of \$1,850.

The maximum salary of elementary teachers will be \$1,650, an increase of \$100, half the amount to be paid September, 1926, and the remainder one year later. Those receiving less than the maximum will be given an added increase of \$100 until the limit is reached.

—All but nine Wisconsin cities of the 120 fourth class communities pay their superintendents of schools more than \$3,000 a year. Forty-eight of this group also serve as high school principals. The larger number pay between \$3,000 and \$5,000. Wauwatosa pays \$6,000 and Two Rivers \$5,000. Eight cities in the fourth class pay \$4,000 or more, these being Chippewa Falls, Edgerton, Marshfield, Neenah, Portage, Reedsburg, Wisconsin Rapids and Menasha. The superintendent of Milwaukee, metropolis of the state, receives \$9,000 a year, the largest in Wisconsin. He administers seven high schools and the entire system of grade schools. Of the seventeen cities in the third class, only two pay their superintendents less than \$4,000. The salary is \$5,000 or more in Eau Claire, Janesville, La Crosse, Madison, Manitowoc, Oshkosh, Wausau and West Allis. Seven more pay \$4,000 or more: Ashland, Beloit, Green Bay, Marinette, Sheboygan, Waukesha and Marinette. Kenosha, Racine and Superior are in the second class, and pay \$6,000, \$6,000 and \$4,000, respectively.



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SCHOOL HYGIENE

SIGNS AND SYMPTOMS OF DISEASES COMMON TO CHILDHOOD

The teacher, nurse, or dental hygienist is not expected, nor is she permitted by law, to diagnose diseases or to prescribe treatment. She is, however, expected to report to the proper authorities any deviation from the normal in a previously healthy child. She should report to the school physician or dentist and, in the case of communicable disease, to the health officer, and she should establish follow-up contacts.

Believing that there are certain symptoms in the early stages of the so-called children's diseases which may be recognized before a diagnosis is made, the director of the division of physical education and health of the state of Connecticut has prepared a list of the signs and symptoms for the guidance of teachers in the classrooms. The child should be separated from the others and observed, sent to the school physician or nurse, or sent home with a written explanation to the parents. The symptoms to be noted are as follows:

Disinclination to enter into the daily activities.
Lassitude, drowsiness, faintness.
Fever, chills.
Unusual flush or pallor.
Dizziness, nausea, vomiting.
Sore throat.
Red, watery eyes.
Nasal discharge.
Skin eruptions or rash.
Frequent or spasmodic coughing.
Convulsions.
Acutely swollen glands.
Headache or severe pain anywhere.
Earache.

Classified Signs and Symptoms

Any of the following indications of illness are sufficient as reasons for excluding the pupil from the classroom.

1. Unusual rash or skin eruption may indicate, scarlet fever, German measles, chicken pox, smallpox, ringworm, scabies, impetigo.
2. Sore throat may indicate diphtheria, scarlet fever, measles, tonsillitis.

3. Red or discharging eyes may indicate measles, German measles, pink eye.
4. Running nose, may indicate measles, diphtheria, scarlet fever, influenza, cold.
5. Cough, frequent, spasmodic or with a whoop may indicate whooping cough, tuberculosis, measles, cold.

SCHOOL NURSE ADMINISTRATION

"At the present time the most important special agent in school health work is the school nurse. The employment of a competent person in this post has practically always meant her retention, raise of salary, and often reduction in the number of pupils assigned to her by the employment of other nurses. Her work has changed considerably; she is no longer chiefly a searcher for and eradicator of vermin; and with the invitation of parents to attend the physical examination of their children, her labor in 'following up' physically defective pupils and getting something done for them is being lightened. The better training of teachers in observing the physical traits of pupils will also relieve her of work; but there is still very much to occupy her time, and she continues an indispensable agent in every well-ordered school system. In fact, in cities of smaller size, and in the rural districts, her worth is just being discovered. The number of cities employing nurses has more than doubled in the past ten years, while the proportionate increase for rural schools is very much greater."

This paragraph introduces the subject of school nurses dealt with in a pamphlet issued by the United States bureau of education. It is told that of the 179 cities having a population of 30,000 and over, 136 cities employ school nurses, and that the average number of children per nurse as given by these cities is about 3,000, the lowest 800, while the highest is 7,000.

The minimum salary reported for a staff nurse is \$637 (8½ months), and the maximum \$2,700. Average salaries paid in certain cities will be found in the accompanying table.

In 66 cities nurses are appointed through examination; 88 cities reported no examination necessary for appointment; twelve cities specify that it is necessary for a nurse to hold a certificate as registered nurse, and thirteen cities did not furnish information on this subject.

HYGIENE AND SANITATION

—Dr. William J. O'Shea, superintendent of schools of New York City, has recently notified

the principals in the schools that the board of education will not finance the operation and maintenance of school dental clinics. Clinics already in operation will be continued provided there is no cost to the board of education for such operation. All dental clinics must be conducted in accordance with the regulations of the board and the written consent of parents must be obtained before pupils are treated.

—The state health department of New York has announced the opening of a campaign to eradicate diphtheria from the state. The first step will be to convince parents, public officials, and others of the desirability of protecting children under 10 years of age against diphtheria with toxin-antitoxin. The state health department furnishes standardized toxin-antitoxin mixture without charge to school physicians and private practitioners of medicine.

—Philadelphia, Pa. The board of education has authorized immunization against diphtheria, by means of the Schick test and anti-toxin, the same to be carried out by school medical inspectors at the request of parents. The burden of responsibility in immunization will rest on the department of public health of the city.

—Hilo, Hawaii. Children in the Hilo town schools who become afflicted with trachoma are placed in separate schools. The school is provided with three teachers for about seventy children, and has playground equipment, lunches and other facilities similar to the other schools.

About 26 children in the county tuberculosis sanitarium are given instruction under a regularly appointed teacher. The children physically able to receive instruction are thus given equal opportunities with healthy children.

Hot lunches are served by practically all the town schools. The work has been carried on for a number of years so that it is now found in practically all the schools.

—Health officials of Baltimore have completed a health survey of the entire city, with the idea of increasing the branch of the service most needed in each section. Wherever a high general death rate is discovered, all the health forces of the city will be concentrated.

—Riverside, R. I. The school board has approved the establishment of a dental clinic in the Riverside grammar school.

(Concluded on Page 144)

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**Discard the Towel Nuisance—
Install Sani-Dri—Save 75%
OF YOUR TOWEL BILL**

YOU want to give your teachers and students the best of everything. But there is a limit to school funds—and many places to put them.

In the Sani-Dri you have not only a better method of drying faces and hands—but you can cut your towel bills 75%. It is Nature's way—the ever-ready way—an electrical breeze that dries faces and hands completely.

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Teachers like the Sani-Dri because it is so sanitary, so luxurious, and makes their skin feel so well. A Sani-Dri installation will immediately bring favorable comment from your entire faculty.

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Children like to dry their face and hands the Sani-Dri way. They will be proud of the installation and anxious to tell everybody about it. It will be a practical lesson in sanitation for them, and their washroom will no longer be mussy with soiled towels.

Parents Like It

Parents approve of the Sani-Dri. The possibility of their children catching contagious diseases transmitted by towels is reduced.

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Board members like the economy of the Sani-Dri. With so many calls for school funds they appreciate the saving that it brings. Waste is sure to result if paper or cloth towels are used.

With the Sani-Dri, waste is impossible. It saves at least 75% on towel bills. The current of air is turned on by pressing a button. It turns itself off automatically after allowing time for

the hands and face to be thoroughly dried.

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Let us prove, in your own wash rooms, that Sani-Dri is the better way—the most economical way—to dry faces and hands. Write today—you won't be obligated.

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— Builds good will—Drys by evaporation—Dries Rapidly—Good for the skin—Sanitary—Drying facilities always there—Dries Hands and face equally well—Press a button to start—Stops automatically—2 Sani-Dris to 3 washbowls usually sufficient—Made in pedestal or wall type—110 A. C. or D. C.



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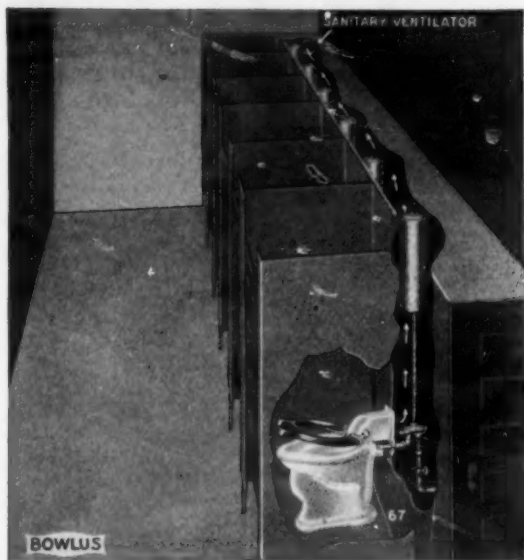
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Executive's Name

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Bowlus Ventilated Jewel Closet No. 67

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No. 67 Bowlus "Jewel" Seat Action Closets—designed especially for school requirements. Valve, tank and connections assembled in air-tight utility room from which bowls are receiving a constant supply of fresh air through the vent conduit, insuring perfect sanitation in both bowl and toilet room.

Bowlus No. 67 Raised Rear Vent Closet includes automatic Jewel Valve, vitreous china enameled grey iron vent conduit, extra heavy vitreous china jetted bowl with extended front lip. Also open front and back ebony or natural oak seats with nickel plated and polished seat attachments, and concealed galvanized compression tank.

Vent can be attached to any regular wash-down or jetted bowl or where raised rear vent bowl is used. Wall of utility room may be marble slab, brick, slate or cabinet steel sheeting. Long or short vents supplied according to materials used for utility room wall.

We furnish only materials for closet. Materials mentioned above for walls are suggestions only.

Roughing-in 8 inches from utility room wall.



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Bowlus "Jewel" No. 61 Concealed Tank Closet Combination, seat operating, includes Jewel nickel plated and polished automatic valve, with extension through wall. Elevated or low down concealed galvanized compression tank, and flush pipe. Extra heavy jet vitreous china bowl. Golden oak closed front seat. Roughing-in measurements 13½ inches.

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(Concluded from Page 142)

—Dr. Emily A. Pratt, who serves as the eye and ear specialist for the New York state department of education, is specially concerned in the prevention of blindness. Through her efforts new teachers in New York will not only be enabled immediately upon their graduation from normal schools to carry out the laws requiring periodic examination of the eyesight of school children, but will have a grasp of the fundamental principles of good illumination, of ocular hygiene and of sight conservation in general. As the result of this arrangement, fewer children in New York State will be retarded in their school work because of the teacher's failure to recognize in many cases that defective vision rather than a mental defect has been the cause of lowered scholarship."

—The Indiana state board of education has appointed a committee of five to investigate the subject of schoolroom ventilation. The Indiana law requires the use of forced air in all larger school buildings. President Elliott of Purdue University commenting upon the law said: "We are victimized by the manufacturers of new-fangled devices and contraptions that give us everything but air."

—Diphtheria, the child's worst enemy, is being vigorously attacked in Minnesota. The state health authorities propose to stamp out the disease by distributing toxin-antitoxin in any amount free to health officers, physicians, and school boards of the state.

—The health authorities of New York state are making efforts to immunize children against diphtheria. "To be able to protect children against such a dangerous disease as diphtheria is one of the blessings of modern preventive medicine," says Frank P. Graves, state commissioner of education. "Our school authorities will welcome the health authority program."

—Dr. Samuel S. Adams has resigned as medical inspector in the public schools of the District of Columbia, having reached the age of 70 years. Dr. Adams is a specialist in children's diseases and he accepted the appointment in order to be of service to the public school children.

The Testing of School Drinking Water

In compliance with a rule of the New Jersey State Board of Education that all school drinking water shall be tested during August of each

year, more than 740 school water supplies have been examined by the bureau of chemistry in the State Department of Health. The tests are exclusive of the tests made of drinking water from public supplies which are tested four times each year.

Many boards of education have driven new wells to take the place of the shallow dug wells which are common in the rural sections and the type which showed a high percentage of contamination.

At the last meeting of the state board of education, the rule was amended upon the advice of the state board of health so that the testing takes place during March and April. This means that another testing will be made at once to act as a re-check on the test of last summer. The reports of tests must be made to the boards of education before June first, so that correction of the condition may be made during the summer months.

Emeritus Service in Chicago

—Chicago, Ill. The special committee on rules and administration has asked the school board to approve an amendment of the rules regarding emeritus service. The rules, as amended, read as follows:

Section 1. There is hereby created a branch of the educational service of the Board of Education which shall be known as Emeritus Service, to which all members of the teaching force, including teachers, principals, supervisors, directors, district superintendents, assistant superintendents, superintendents (other than the Superintendent of Schools), and examiners, except as hereinafter provided shall be assigned when they have respectively reached the age of 70 years. Provided, however, such assignment shall be made only in cases where said persons have been in service in the public schools of the city of Chicago for at least Ten Years prior to such Assignment. Hereafter no member of the teaching force shall be continued in classroom or supervising duties who shall be more than 70 years of age.

Section 2. It shall be the duty of the Superintendent of Schools on the first day of January and the first day of July in each year or as soon thereafter as possible, to report to the Board of Education in writing the names of all persons of the teaching force who have or

will have attained the age of 70 years on the first day of February or August next ensuing, and he shall recommend (unless he is of the opinion that charges should be preferred against such persons in accordance with the Statute and Rules in such cases made and provided), that such persons who have been in service in the public schools of the City of Chicago for at least ten years shall be Transferred from regular classrooms or supervisory service and shall be assigned to the class of service known as Emeritus Service and be subject to the call of the Superintendent of Schools or the Board of Education for consultation, advice, and such other service as may from time to time be required.

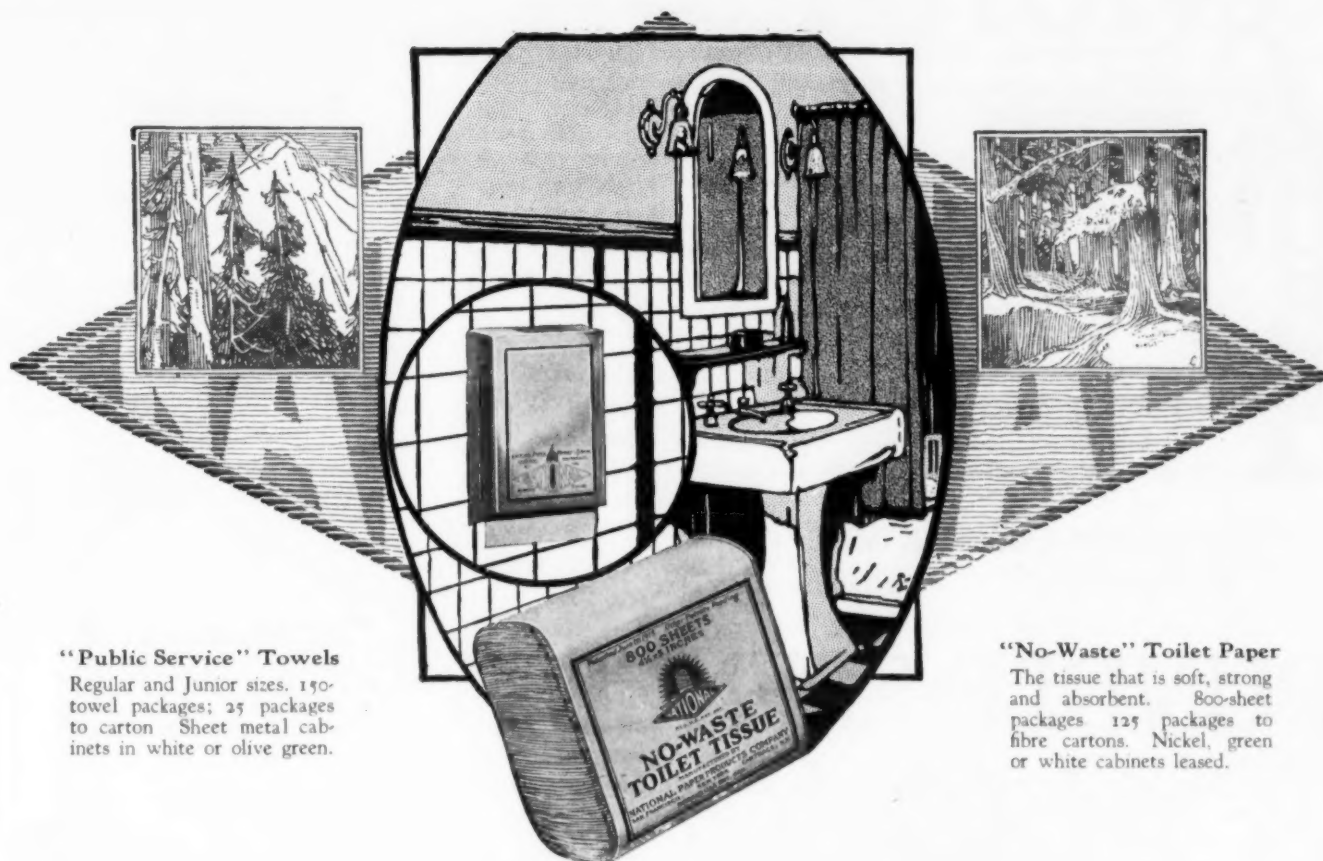
Illinois Publishes Statistical Tables for 1925

The State Education Department of Illinois, in a recent circular, publishes statistics relating to the schools for the year 1925. The data show that there is a total school population of 1,946,659 divided between 997,878 boys and 948,781 girls. The total enrollment in the elementary schools is 1,109,748 divided between 572,738 boys and 537,010 girls. In the secondary schools there is an enrollment of 233,682 divided between 115,392 boys and 118,290 girls. The number of days' attendance was 206,448,580 and the average daily attendance is 1,122,101, making the average per cent of attendance 83. The average cost per pupil enrolled for current expenses was \$72.30 and the average cost per pupil enrolled for all expense was \$90.91.

There were 7,825 teaching positions filled by men and 36,040 by women, making a total of 43,865 teachers. The amount earned by teachers was \$66,920,907, of which \$13,601,286 were earned by men and \$53,319,621 by women. The average annual salaries paid to men teachers amounted to \$1,738, that paid to women teachers amounted to \$1,479, and that paid to all teachers amounted to \$1,525.

The total number of new schools built during the year was 148. Of these, nineteen were schools of eight rooms, fifteen were schools of two rooms, 78 of one room, and nineteen were high schools.

The report shows that 205 school districts employ school nurses or physicians and 257 employ truancy officers.



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The tissue that is soft, strong and absorbent. 800-sheet packages 125 packages to fibre cartons. Nickel, green or white cabinets leased.

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TWO SAFE ECONOMIES begin the moment you standardize on National paper products in your washrooms:

1. The economy of first cost
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Tremendous production of "No-Waste" Tissue and "Public Service" Towels makes possible exceptionally high quality at unusually low prices. The National paper mills are the largest of their kind in the world—and as sanitary as any food manufacturer's.

"No-Waste" is dispensed from attractive cabinets just *two* sheets at a time. Savings in maintenance have averaged from 20% to 30%, in a wide diversity of buildings and plants. Send for descriptive literature and prices. National Paper Products Co., 68 Furnace St., Carthage, N. Y.

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1000 counted sheets in a sanitary wrapped package for the home. Same quality as "No Waste" and made from clean spruce wood only.



A Sanitary Regulation



Rundle-Spence Vertico-Slant Fountains REGULATE sanitation in a way that provides positive drinking sanitation.

Lips can't touch the R-S nozzle—that's the SANITARY REGULATION. The water is clear, cool and refreshing. R-S "health bubblers" prevent waste of water, give continuous service year after year and are the ideal fountains for every school.

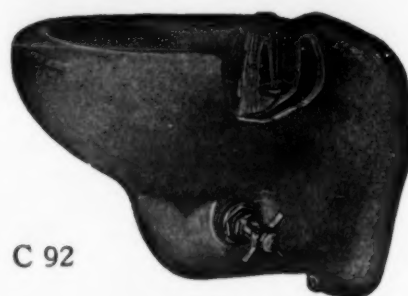
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PROGRESS IN THE VIRGINIA PUBLIC SCHOOLS

Nat. G. Barnhart, Principal, Meadowview Public School, Meadowview, Va.

The marks of progress in the Virginia public school system may be indicated first, by the advance in physical equipment in the way of an increased building program; second, by the better preparation of the teachers; third, by the number of elementary schools which have become standardized; fourth, by the increase in the number of accredited four-year high schools; fifth, by the additional emphasis placed upon vocational education; sixth, by the revision of the elementary school course of study, and seventh, by the scientific tests given to the high school graduates.

The first mark of progress is in the enlarged building program. Six years ago the state board of education of Virginia began a movement which resulted in an enlarged school program. At the request of the county people, the board prepared plans and specifications for better schoolhouses and sent them out to rural districts which requested help.

The new emphasis followed the educational survey of the Virginia school system made in 1918-1919. The report of the survey issued in two volumes, startled the people of the state, when it declared that "by every measure applied, the one-room school is the poorest educational institution in the state. The pupils in these schools are not getting a square deal."

In the six years which have passed, more than one hundred one, two, three, and four-room buildings have been erected under state supervision, at an approximate cost of \$350,000. About 110 buildings have been erected in accordance with state specifications, ranging in size from four-room buildings with auditorium, up to twenty-room buildings with auditorium, varying in cost from \$8,000 to \$90,000. The total approximate cost of such schools is \$3,000,000.

The State Board of Education had authorized loans from the literary funds of the state for the support of building programs in several counties. In addition to this support, a cash appropriation of \$786,000 was made to the schools of the state and checks were mailed to the counties. At the present time there are still 3,460 one-room rural schools in the state, whose average school term is 146 days, but some

progress has been made in improving these isolated institutions.

The second mark of progress is that the teachers are better prepared. In 1910, the number of teachers holding higher than first grade certificates was 2,820, or about 27 per cent. In 1924, the number was 9,466, or about 57 per cent. This is an increase of thirty per cent in fourteen years.

In 1924-1925, there were 7,106 certificates issued by the state board. Of this number 1,746 were issued to persons holding a college degree, or a teacher-training institution diploma, based on four years of work. There were 1,139 certificates issued to persons not prepared to obtain a first-grade certificate, while 2,235 such credentials were issued in order to provide sufficient teachers for the schools.

The third step is an increase in the number of standard elementary schools. This is one of the more recent movements in the educational system of the state. In 1924-1925, approximately 123,000 pupils in the counties were enrolled in more than 450 standard elementary schools, and elementary departments of standard high schools. This means that 36 per cent of the children of rural Virginia have larger and better opportunities for an elementary education than ever before. The state requires a nine-month school term and requires that an average of 35 pupils per teacher must be obtained before a school may be classed as a standard elementary institution. The state subsidizes the county for each school meeting the requirements.

There are a number of additional accredited four-year high schools, which is an increase in number of schools and attendance. In 1913, there were 103 four-year accredited high schools, with an enrollment of 10,114 pupils and 1,489 graduates that year. Since that time the four-year accredited senior schools have increased until in 1924-1925 there were 359 such institutions with an enrollment of 45,633 pupils and 6,633 graduates. The percentage of increase is indicated by the fact that there has been an increase of 154 per cent in schools, 351 per cent in enrollment, and 346 per cent in graduates.

Of the total enrollment, 42.2 per cent are boys and 57.8 per cent are girls. The median average daily attendance was 92.8 per cent, while the accredited high schools located in the 23 cities of the state had an average daily at-

tendance of 95.6 per cent. Of the 6,633 graduates, 36 per cent are boys and 64 per cent are girls. The larger, better equipped, and better taught schools attract and hold their pupils, for the 359 senior schools had an average attendance of 92.8 per cent, as compared with 76 per cent, the average attendance for all of the schools of the state in the last year.

Another improvement will be the adoption of scientific tests for graduates of the high schools. The state board will begin a two-year testing program in the high schools with a view of determining the preparation of the graduates and their fitness for college entrance. These tests will be conducted in seven counties and three cities and the pupils will be tested in intelligence, reading, English and arithmetic previous to their graduation. If the experiment proves satisfactory, it is planned to extend the tests to all counties and cities of the state. It is believed the effect will be higher entrance requirements on the part of the colleges.

Information Wanted on Grade and Departmental Teaching

The Bureau of Educational Research of Ohio State University is interested in a carefully controlled study of the relative advantages of grade and departmental teaching. For that reason any information concerning school systems which are about to change either from grade to departmental teaching or from departmental to grade teaching will be appreciated. If school superintendents or principals of schools in which such changes are contemplated will communicate the fact, it will assist materially in setting up the problem effectively. Communications should be addressed to Dr. B. R. Buckingham, Director, Bureau of Educational Research, Ohio State University, Columbus, Ohio.

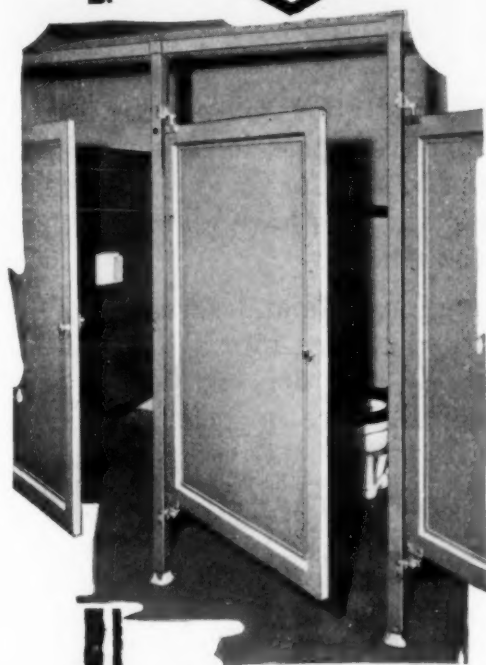
Death of Mr. Tyson

—Mr. Charles Tyson, a member of the school board at Council Bluffs, Ia., died at his home in that city on April 14th, following a three weeks' illness of meningitis.

Mr. Tyson had been a member of the board of education since last March, when he was elected over five candidates. At the time of his death, he was manager of a local insurance firm. He is survived by a widow, one son, a mother and sister.



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ST. LOUIS INSTRUCTION DEPARTMENT REORGANIZED

St. Louis, Mo. In reorganizing the department of instruction for the most efficient performance of the various administrative duties for which the superintendent is responsible, it has become necessary to assign definitely the responsibility for every act and transaction. It has been ordered that there be created the following divisions with directors, assistants, and clerks as outlined, with salary schedules as indicated in each case.

1. **Division of Housing and Fixed Equipment:** Director, Division of Housing and Fixed Equipment; twelve calendar months; salary schedule—first year, \$3,700; second year, \$3,900; third year, \$4,100; fourth year, \$4,300; fifth year, \$4,500; sixth year, \$4,750; seventh year, \$5,000; eighth year, \$5,250; ninth year, \$5,500. Clerk—first, second, or third rank; schedule, clerks—administration.

2. **Division of Curriculum, Books, and Supplies:** Director, Division of Curriculum, Books, and Supplies; twelve calendar months; salary schedule—first year, \$3,700; second year, \$3,900; third year, \$4,100; fourth year, \$4,300; fifth year, \$4,500; sixth year, \$4,750; seventh year, \$5,000; eighth year, \$5,250; ninth year, \$5,500.

Two assistants, first or second rank; twelve calendar months; schedule, assistant, first rank—first year, \$3,000; second year, \$3,240; third year, \$3,480; fourth year, \$3,720; fifth year, \$3,960; sixth year, \$4,200; seventh year, \$4,440. Schedule, assistant, second rank—first year, \$2,100; second year, \$2,280; third year, \$2,460; fourth year, \$2,640; fifth year, \$2,820. Clerk, first, second, or third rank; schedule, clerks—administration.

3. **Division of Records and Statistics:** Director, Division of Records and Statistics; twelve calendar months; salary schedule—first year, \$3,700; second year, \$3,900; third year, \$4,100; fourth year, \$4,300; fifth year, \$4,500; sixth year, \$4,750; seventh year, \$5,000; eighth year, \$5,250; ninth year, \$5,500. Clerk, first, second or third rank; schedule, clerks—administration.

4. **Division of Personnel:** Director, Division of Personnel; twelve calendar months; salary

schedule—first year, \$3,700; second year, \$3,900; third year, \$4,100; fourth year, \$4,300; fifth year, \$4,500; sixth year, \$4,750; seventh year, \$5,000; eighth year, \$5,250; ninth year, \$5,500. Teachers' clerk; same position, rank, and schedule as authorized under administration.

5. **Division of School and Community Relations:** Director, Division of School and Community Relations; twelve calendar months; salary schedule—first year, \$3,700; second year, \$3,900; third year, \$4,100; fourth year, \$4,300; fifth year, \$4,500; sixth year, \$4,750; seventh year, \$5,000; eighth year, \$5,250; ninth year, \$5,500. Two clerks, first, second, or third rank; schedule, clerks—administration.

DEPARTURES IN CITY SCHOOL SYSTEMS

The progress made in the administration of the American schools, as attested in certain movements and departures of recent years, forms the subject of a discussion by W. S. Deffenbaugh, chief of the city school division of the United States bureau of education. He shows that the city school systems are engaging in more extensive labors than ever before and have not hesitated in accepting innovations likely to give greater efficiency to their efforts.

"Within the past few years more attention has been given to adapting the school to individual differences than to any other phase of school administration," he says. "The fact that children differ in ability to progress through the grades has long been recognized but the general use of intelligence and achievement tests has emphasized the fact that there is a wide spread of mental ability in the same class—that some pupils are of the highest intelligence and others of very low intelligence. With all these facts before them, school administrators have come to see how absurd it is to expect children of the same chronological age but of different mental ages to progress through school at the same rate."

The Salary Tendency

Mr. Deffenbaugh then points out the policy almost uniformly adopted by boards of education that efficiency of service in the teaching forces rests in a large part upon adequate compensation. Here he says:

"During the biennium considerable attention has been given to the formulation of salary

schedules and to plans for rating teachers. The single-salary schedule—that is, equal pay for equal training and experience—whether the teacher teaches in an elementary or a high school, is growing in favor among superintendents and teachers. The chief advantages claimed for this type of schedule are the following:

"1. It is easy to operate and permits better business methods. 2. It eliminates class consciousness among teachers. 3. It contributes strongly to a feeling of unity and satisfaction in the corps. 4. By financial recognition of additional experience and training, it promotes tenure. 5. It attracts superior ability and training to the elementary schools and gives elementary teachers a higher appreciation of their services. 6. It emphasizes high standards of professional attainment and encourages professional study and growth, thus producing more efficient teaching in every grade. 7. It permits the transfer of teachers without financial loss from positions for which they are not adapted to positions where they can render efficient service.

"The question of equal pay for men and women doing the same kind of work has been discussed pro and con for several years, and some cities have adopted the plan of giving men and women equal pay. As a result, the school boards in these cities are being confronted with the following problems: Shall the salaries of women teachers be increased so as to equal those of the men, or shall the salaries of the men be reduced to equal those of the women, or shall there be an averaging of the salaries so that the school budget may not be increased? If the salaries of the men are lowered, will not many of them leave the profession? The question may be asked, If all salaries are raised to the level of the men's salaries, what will be the result? It has been predicted that more men will be employed. Heretofore school boards have been paying men more than women because men could not be had for the salaries paid the women teachers; but owing to the fact that men had to be paid more, only a few men have been employed in many school systems."

Research and Tests

On the advancement made in the maintenance of research bureau, the investigator says:



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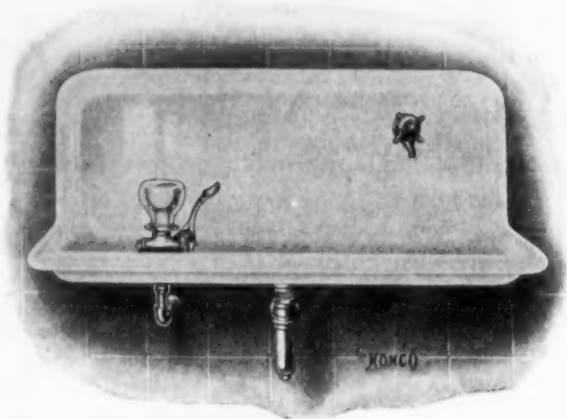


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Porcelain enameled iron roll rim drinking fountain with 12-inch integral back, concealed hanger, lever handle self-closing valve with vitreous china bubbler. Concealed pressure regulator, ice water faucet, outlet strainer, plain "P" trap and brass supply pipe to wall.

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PIONEER MANUFACTURERS OF PLUMBING FIXTURES FOR SCHOOLS

"A few years ago all questions of school policy were settled largely upon the basis of mere opinion. Today mere opinion does not play such a prominent part in school administration, but as scientific data is often lacking it still plays a very large part. Whatever opinion is offered should be based upon facts, if there are any available, rather than upon theory. School people, however, are slowly becoming more scientific. Boards of education, if composed of men and women accustomed to dealing with data, do not listen to orations but ply the superintendents with questions regarding the most successful practices in school administration.

"Not content to depend upon guess work, boards of education are establishing research bureaus to collect and compile data regarding practically every phase of their respective school systems.

"In 1923 there were about 80 research bureaus connected with city school systems; now there are about 120 such bureaus, although they are not always so designated. In some of the cities, especially the smaller ones, a supervisor may do the educational research work. In some of the larger cities the research work is under the direction of an assistant superintendent.

"An outgrowth of the use of such tests is the new type of examination that has been introduced into many schools. The old general question type of examination was not easily graded. One teacher would grade a paper 90 per cent, another the same paper 70 per cent, and another 50 per cent or even less. The grading was purely subjective, depending upon the opinions of the persons doing the grading. The new type of examination admits of but one answer, which is either right or wrong. Since the pupil has to do little writing in this type of examination and the scorer little reading, the test can be made much more comprehensive than the old-style examination. The traditional high school examination usually consists of 10 questions and requires two or three hours. The new type may consist of 50 or 100 questions and requires about an hour of the pupil's time."

The All-Year School

The all-year school has its ardent champions but also its opponents. The experiment which has been carried on more intensively in Newark,

N. J., than anywhere else is still clouded in conjecture. Its defenders hold that it saves two years' time now required to complete the elementary school course and does not interfere with the physical development of the pupil.

The answer of David B. Corson, superintendent of the Newark schools, who opposes the all-year school, in refutation of the claims made, is presented. Mr. Deffenbaugh adds:

"The failure to secure acceleration of pupils as theoretically claimed for all-year schools, the impossibility of maintaining a stable and satisfactory organization throughout the year and of coordinating well such organization with the traditional school system, the unwise practice of sending immature and poorly prepared pupils into the high schools rather than making them as strong as possible in the elementary studies, are serious faults of the all-year system. The cost of the all-year schools is also a matter for careful consideration. Several of the smaller cities that have tried the all-year plan have discontinued it.

"One or two experiments, however, are not sufficient to prove or disprove whether it is desirable to organize the schools of the country on an all-year plan. Other experiments with this type of organization will be watched with interest."

Both Omaha, Nebraska, and Nashville, Tennessee, are continuing the experiment, and the superintendents of both cities defend the system.

How Parents Can Help Pupils

—The United Parents' association of New York City has issued the following suggestions on cooperation of parents with the school.

1. Arrange the breakfast and lunch hours so that there is no rushing at home or to school.
2. Encourage punctuality and regular attendance, not permitting trifles to interfere.
3. See that the children are dressed simply, neatly, modestly, and suitably in accordance with the weather.
4. Insist upon children under fourteen having at least ten hours' sleep.
5. Find out how much time should be devoted to home work, and see that it is faithfully done.
6. Provide a quiet place for home study, with good light and ventilation. Prevent interruptions as far as possible.

7. Show an interest in the children's school work, athletics, and other activities.

8. Visit the classroom during Open School Week, and at other times, for a better understanding.

9. Do not criticize the teachers or school at all within the children's hearing. Always hear both sides of every question and ask the teacher about it.

10. Instill in the children habits of obedience and respect for authority.

11. Picture the school as a happy, desirable place rather than as one children should dread.

12. Keep in mind that the school offers unlimited opportunities to those who take advantage of them, parents as well as pupils.

Plan to meet other parents in the school. It will help you understand your children better. Mothers should arouse the interest of fathers in the school activities and get their cooperation. If there is a Parents' Association in your children's school, join it.

CHATS DURING RECESS

At the Wisconsin school board convention a member related a story to the effect that his wife and he had agreed that their daughters attending the high school must not bob their hair. They were quite firm in their contention.

One day a number of classmates visited his daughters. He noted that in comparison with the other girls his own daughters looked somewhat old fashioned and concluded that he would have to revise his parental dictum on hair dress.

"I have come to the conclusion" he told his wife one day "that we must allow our daughters to bob their hair."

"I agree with you" commented his wife. "In fact I will have my own hair bobbed too!"

—Miss Pearl Burt, principal at Elmont, L. I., thrashed two boys with a rubber hose. The father complained and asked for the dismissal of the teacher. The school board sustained the teacher, holding that the chastisement was wholesome and effective. The father then expressed complete satisfaction. He had enjoyed the thrill of protest, and that was something. But, the boys were the real beneficiaries in the transaction.

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No mortising.

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Page 23—Cat. 30

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CHICAGO CORRESPONDENCE

School costs have doubled in Chicago during the past ten years. In 1914 the per pupil cost of education in Chicago was \$51.24. In 1924 the cost was \$100.70. There are seven principal reasons for the increased costs:

1. There has been a tremendous increase in school enrollment, much greater than the general population increase.

Ten-Year Comparison in Chicago

Year	Growth of school enrollment	Growth of city population
1914	273,719	2,437,526
1924	405,213	2,942,605
	(48% increase)	(12% increase)

The average increased enrollment for the past five years has been 18,150 more per year. Part of the increase may be due to better enforcement of the compulsory attendance laws. Chicago pupils must attend regular day school or continuation school until 17 years of age. The compulsory attendance bureau has a reputation for efficiency, and Chicago ranks high in percent of attendance.

2. High school costs are two and a half times greater than elementary school costs, yet the greatest increase in school attendance has taken place in the high school. In 1914 there were twelve persons in the Chicago high schools for every one thousand of city population; in 1924 there were 22 per thousand.

3. The holding power of the schools has increased. From 1915 to 1923 the number of pupils who graduated from high school compared with those who started in the first grade, had increased three per cent. Many summer review elementary schools are open in recent years, and during the summer of 1926 there will be eleven high schools in session for an eight-week period.

4. The school curriculum and the service have expanded. Due to pressure of the public the schools have taken on, through convenience of administration, many semi-socialistic auxiliary agencies. Some of the increased school costs can be credited to 43 new activities added to the Chicago schools in the past twenty years.



THE LATE W. W. LEWTON,
Cicero, Ill.

William Woods Lewton, who was superintendent of schools for the past eighteen years at Cicero, Ill., a suburb of Chicago, died suddenly April 17 of acute heart dilation. Previous to his appointment at Cicero he served for three years in the government educational service in the Philippine Islands.

Notwithstanding the fact that Mr. Lewton was active in one of the smaller school systems he took a commanding place in the educational activities of the state of Illinois. When four years ago the state legislature created a commission for the purpose of making a comprehensive study of the subject of state school support and taxation, Mr. Lewton was made its chairman. He performed this difficult task with great energy and skill and rendered a notable service to the state. He proved himself a strong champion for legislative reforms designed to place the educational labors of the state upon a better footing.

5. The teachers and supervisory officers are paid higher salaries. However, standards are higher. Teachers have had to meet constantly increasing demands of training and experience. Some years ago a college degree was not required, even for a principalship. Now, in order to be eligible for a principalship, a candidate has to have a college degree, must have had four years' successful teaching experience, and must pass two examinations—a written 3-day examination in seven subjects and an oral examination before the board of superintendents.

6. Like most other communities, Chicago stopped school building construction during the war. A portion of the building fund tax levy was turned back to the taxpayers. Now, however, building operations must catch up with an accumulated shortage of enormous proportions. On September 1, 1924, there was a shortage of 1,108 classrooms and 80,000 seats. During 1926 the school board expects to open up 36 new buildings, and by 1930 most of the accumulated shortage due to wartime cessation of building, will have been overcome.

7. Lastly, much of the reputed increase in school costs is really a fiction—it represents simply inflated money. In purchasing power the Chicago dollar is worth but 57 cents compared with the 1914 value of the Chicago dollar.

Dr. Walter Dill Scott, president of Northwestern University, broke his wrist while attempting to crank his car. (It seems strange that one who has presided successfully over so many university faculty meetings should be worsted by a crank!)

According to data in the United States Bureau of the Census report entitled "Financial Statistics of Cities, 1923," the average city in the United States with a population of 500,000 or more (Concluded on Page 173)

The teachers of Cicero in a tribute paid to his memory recognize in him a man who gave, without measure, the best that he had in the promotion of every worth-while movement. It is not too much to say that his many-sided career of usefulness cannot be duplicated."

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TRADE PUBLICATIONS

Furniture for Laboratories. The Wiese Laboratory Furniture Co., of Manitowoc, Wis., has issued a new trade catalog of 95 pages, illustrating and describing the Wiese furniture for laboratories. The catalog lists and describes furniture for physics laboratories, chemistry laboratories, biological and agricultural laboratories, also furniture for general laboratory purposes.

The firm maintains an engineering department which is prepared to assist architects and school boards in arranging the details in the planning and installment of these departments in schools. The installation and inspection departments are in charge of skilled engineers who are prepared to handle all the details from the basic idea to the laboratory completely installed and ready for use.

Information concerning the products of the Wiese Furniture Co., may be obtained by writing to the firm at Manitowoc, Wis.

Steel Stool Catalogs. The Angle Steel Co., of Plainwell, Mich., has issued its latest catalogs devoted to angle steel stools, chairs, trucks, tables, factory and office steel equipment.

The firm's line of angle-steel stools and chairs has been designed and built to meet certain needs of the trade. A variety of stools and chairs are listed, differing in style, size, design and purpose, but all alike in point of strength, attractive appearance, and rigidity, even when subjected to unusual strain. Among the advantages of the new furniture are the adjustable feet, sturdy frame, spring back, rubber-tipped feet and casters, and the lustrous enamel finish.

Special attention is directed to the firm's attractive and complete line of revolving stools, its special stools, chairs, and benches. In addition to the rigid, revolving and adjustable stools, there are shown many specially designed stools for practical purposes. There are machinists' stools, with tool box and tray, book-

keepers' stools with foot rests, filing stools with casters, stools with padded seat and back. There are steel chairs for table work, including steel chairs, tablet arm chairs, and bench seats.

The frame and all steel parts of the stools and chairs are finished in a rich, dark olive green enamel, while the wood seats and wood back rests are in golden oak or mahogany. The finished product has a fine appearance and fits well with the furniture in any office or work-room.

Information concerning the angle steel furniture may be obtained by writing to the Angle Steel Stool Company at Plainwell, Mich.

Issue Fan Catalog. The Graybar Electric Co., of New York City, has announced its new fan catalog for the year 1926. The catalog describes the line of fans manufactured by the firm for alternating and direct current circuits, also the non-oscillating, oscillating, ceiling and ventilating fans. The booklet gives descriptive specifications, weights in pounds, and prices of the different fans listed.

Information concerning any of the fans listed may be obtained by writing to the Graybar Electric Co., at 100 E. 42nd St., New York City.

Wallace Portable Machines. The J. D. Wallace Co., of Chicago, has issued an interesting pamphlet describing and illustrating the Wallace portable machines for use in wood working shops.

The pamphlet describes the Wallace portable band saw, universal saw, universal circular saw, plain circular saw, portable jointer, planer and lathe, oscillating grinder and sander, also special saws and cutting heads, and electric glue pots. In each case, specifications and sectional views of the machines are furnished in order that the shop teacher may obtain detailed information before purchasing.

Information concerning the Wallace portable machines may be obtained by writing to the Wallace Company at 134 California Avenue, Chicago, Ill.

Peer Vent Heating Catalog. The Peerless Unit Ventilation Co., of New York City, has issued a small descriptive pamphlet, explaining the construction, installation and operation of the Peer Vent Heating and Ventilating Unit for schools.

The Peer Vent occupies little space and is furnished in either the concealed or semi-concealed

types to meet special architectural needs. It cuts down structural costs, and eliminates large and expensive apparatus and apparatus rooms.

With this system of heating, desks can be placed close to the units without discomfort to the occupants. It is readily adaptable to new or old buildings, and to buildings constructed in sections. Individual rooms may be ventilated separately and economically with the system and the cost of ventilation in rooms not used is completely eliminated.

Information concerning the Peer Vent system may be had by addressing the firm at Skillman Avenue and Hulst Street, Long Island City, New York.

New Albert Pick Catalog. The Albert Pick, Barth & Co., of Chicago and New York, has just issued its new catalog E-28, illustrating and describing equipment, furnishings and supplies for hotels, restaurants, clubs and institutions. The catalog lists a varied line of cafeteria and lunchroom equipment, including chinaware, glassware, silverware, table linens, kitchen utensils and equipment, electric cooking equipment, power kitchen appliances, coffee urns, steam table outfits, milk and cream coolers, and pastry cases and display stands.

The Albert Pick Company also carries a complete line of furnishings and equipment for hotels, clubs and other public institutions.

BENJAMIN H. SANBORN DEAD

Benjamin H. Sanborn, founder and former president of the Benjamin H. Sanborn Company of Boston, died after a brief illness on April 4th. He retired from active business a few years ago and had spent his declining years in North Carolina.

Mr. Sanborn not only attained success in the educational publishing field, but he also manifested, in his home town, Wellesley, Massachusetts, an active concern in civic and religious affairs. The Benjamin H. Sanborn Company will be continued by his associates.

—Dana W. Hall, 60, a member of the firm of Ginn & Company, educational book publishers, died April 23rd in the Augustana Hospital, Chicago, after an illness of several weeks. Mr. Hall was a graduate of Colby College. He entered the Ginn firm thirty years ago, and in 1908 was made a partner. Mr. Hall is survived by a widow and one son.

WINSTON

"What d'ye lack, Sir? What d'ye lack?"



You may need books for your elementary grades or for the high school classes. Whatever your needs may be consider the titles on the Winston list. If you do not have a copy of the latest Winston list send for it today—it is replete with books on many subjects for all grades. Here are a few of the titles that have had phenomenal distributions.

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FOR TEXT BOOKS

THE SELECTION OF NEW TEACHERS

(Concluded from Page 44)

In conclusion, let me say that the complete feminization of our schools has worked a hardship on both boys and girls. Since our high schools contain approximately equal numbers of boys and girls, you will not go far wrong if you divide your corps 50-50 in the employment of men and women teachers. Naturally, you will stand by the principle of equal pay for equal work, but at the same time, you will be derelict in your duty if you fail to get a goodly number of high school teachers of the male sex.

With best wishes for your success,

UNCLE TOM.

WHAT SHOULD THE SUPERINTENDENT EXPECT TO FIND IN THE POTENTIALLY SUCCESSFUL TEACHER?

(Concluded from Page 51)

In this discussion health has been treated as if it were a problem separate and distinct from general training. In a sense it is. Although it is evident that a soundness of general health will have been developed through right emphasis on the various types of training, provided, of course, that original tendencies have not been powerful enough to offset training, human beings are likely to forget the importance of a definite program of health culture unless reminded from time to time. Health enjoyed frequently means health neglected; and health neglected often produces a condition from which it is difficult to recover. Without a soundness in these several phases of health, growth is impossible. In the teaching profession health and growth are as essential to each other as position and salary.

The problem of the health of the potentially successful teacher may be considered by the superintendent from these standpoints:

1. *Evidence that physical health is present and is being preserved.*

2. *Physical and mental cleanliness.*
3. *Alertness and powers of discrimination.*
4. *Goals that stimulate mental growth.*
5. *Evidence of temperate participation in all activities.*
6. *Evidence of ability to mingle agreeably.*
7. *Attitude toward helpfulness and toward fair dealing.*
8. *Personal habits that reflect the character of the person under consideration.*

METHODS OF APPORTIONING PUBLIC FUNDS FOR SECONDARY SCHOOL SUPPORT

(Continued from Page 53)

Federal funds for the vocational education part of the secondary education program are allotted, with the exception of a small fixed minimum, on the basis of need, taking proportion of population as an index. The method of final apportionment depends upon local consent, financial participation, and the maintenance of standard curricula, teaching corps, and equipment. The federal funds distributed to the states can be used only for salaries of teachers, teacher training, and teacher supervision. The importance of properly trained and properly paid teachers to the success of the educational program is thus definitely recognized.

Many of the states still apportion state aid upon the basis of the number of children of school age within the district. Other states, evidently recognizing the fact that such a method neither stimulates nor rewards local educational or financial effort, apportion on actual school enrollment, average daily attendance, number of qualified teachers provided, special subjects that need promotion, special services given free to students by the local district, and other stimulating forms of apportionment. The

apportionment of a special equalization fund in reverse ratio to the district's ability to support good schools is, perhaps, the most significant of the methods employed. The special apportionments of aid where free transportation is furnished, free tuition to other districts maintaining secondary schools is granted, and where free milk, free medical or dental service, or free board are given to students, are especially important indications of a developing policy to provide at public expense approximately equivalent educational opportunities for every child, irrespective of his place of residence, or his economic or social status.

The statutes of several states grant to state departments of education the discretionary power of approving public secondary schools for state aid, or of withholding aid when acceptable standards of work are not met and full compliance with the state school laws is not given. In states where county aid to secondary schools is granted, the methods of apportionment are usually similar to those of the state. In the county, the county superintendent is usually authorized to apportion the county school funds. In the state, the state superintendent is usually designated as the official who shall apportion the state aid. The state and county superintendents are given rather wide discretionary powers in apportioning funds. Within the limitations of the constitutions and statutes they have discretionary power relative to courses of study, standards of equipment, standards of buildings, qualifications of teachers and reports from local school boards. Another important discretionary function recently added to the duties of state and county departments is that of apportioning the special equalization funds.

The power to withhold apportionments of special state and county aid is the chief power of persuasion available to the educational lead-

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ers of the larger administrative units. Also, many states are now providing in their statutes for methods of apportionment that are intended as rewards of educational effort. The statutes of some are providing special emergency or equalization funds that are to be apportioned to districts otherwise unable to support financially a good educational program, to provide educational opportunities to those to whom they would otherwise be denied.

EXPLOITATION OF OUR SCHOOLS

(Concluded from Page 59)

and instead of putting them on the legitimate market (where he knows they will not sell) he puts on a campaign among school children. The innate enthusiasm of children for any kind of a contest is capitalized. The children go from door to door—usually without organization and with about a half dozen going to every house—selling mottoes to people who do not want them but buy with the belief that they are helping some deserving child. The kindest thing that can be said of such tactics is that it is a cheap way to advertise. The school is a public institution. Most of the pupils are present because of compulsory attendance laws. When children are thus assembled for the purposes of education, no school head has the right to turn them over to shysters.

Teachers, too, are much sought for by concerns who have something to foist upon the public. Toward the close of each school term superintendents are swamped with letters asking the names of "energetic teachers who wish to make easy money during the summer months." The superintendent who answers such inquiries is doing an injustice to his teachers, as well as to the public at large.

There is another side to this matter which most people probably do not appreciate. Their life experiences have been such that they can-

not see this nuisance as others do. When I was a boy a nickel looked as big to me as a cart wheel. I was one of four children of a day laborer whose income was usually spent for needs of the home before pay-day came around. To ask for money to buy trinkets was wholly out of reason. But the school exploiter, then as now, was on the job, and when he offered his wares I was caused once more to feel the sting of poverty, for I wanted to buy when I saw others buying. And I was too proud to peddle, as I am yet and hope to ever continue to be. For the sake of such children—and we have more of them in our schools than we realize—if for no other reason, school authorities should protect the schools from exploitation.

RHODE ISLAND LEGISLATION

(Concluded from Page 62)

building programs, and requires an annual appropriation of the amount requested by the school committee in its annual budget up to 30 per cent of the city's general tax revenues for the average three preceding years. There was serious opposition to the bill because the 30 per cent provision operates not only as a minimum requirement if the school committee asks so much, but also to restrict the school expenditure for operation and maintenance to 30 per cent, if the city council is unwilling to appropriate more than 30 per cent. The 30 per cent as a maximum limitation may operate as a restriction, the general state school law requiring towns to provide enough money to finance maintenance on the program outlined by the school committee. From this point of view the 30 per cent provision is distinctly retroactive.

New College Building

The General Assembly resolution has increased the appropriation previously made for a new building for Rhode Island College of Education, and has passed, subject to ratifica-

tion by the university corporation, an amendment to the Charter of Brown University which permits the election of six additional trustees without restriction as to religious or denominational preferences. The original charter specified the denominations from which trustees might be chosen. The old classifications continue as to 36 of the 42 trustees hereafter to constitute the corporation. It is provided that the president of the university, who heretofore must be a Baptist, may be elected and may continue to hold office without limitation as to denomination or religion.

THE TEACHER'S CODE OF ETHICS

(Concluded from Page 64)

4. Between the teacher and the supervisory or administrative officials there should be full and generous confidence and cooperation.
V. TO THE PROFESSION.

1. The teacher should stand for the highest ideals of educational service.
2. He should recognize that work well done is in itself partial recompense for his labors.
3. He should maintain an open mind toward all forms of professional progress.
4. In business relations his conduct should be such as to dignify his profession.
5. He should perform his daily tasks so skillfully and so joyously that some of the choicest spirits will be inspired to carry on his work.

DEPARTMENT OF SUPERINTENDENCE MEETING

The secretary of the Department of Superintendence of the N. E. A., has announced the dates for the 57th annual meeting, which will be held February 27th to March 3rd, 1927, in Dallas, Texas.

The headquarters, registration, general sessions, and exhibits will be in the Fair Park Auditorium and Exhibit Hall. No hotel has as yet been selected as the general headquarters for the meeting.



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THE MINERAL POINT HIGH SCHOOL

(Concluded from Page 67)

The basement contains the gymnasium, the toilet and shower rooms. In the rear section, which is entirely above ground, are found an automobile shop, a manual training shop, a drawing room and a domestic science department. The gymnasium is entirely cut off from the remainder of the school in order that it may be used independently during recitation periods and after school hours.

The first floor contains the principal's office, a teachers' room, and a medical inspection room, a sewing room, commercial and type-writing rooms, four recitation rooms, and the balcony of the gymnasium.

On the second floor there is a large assembly room seating 250 to 300 students and equipped with a stage and dressing rooms. The rear of the assembly room contains a spacious library, the high school principal's office, and a fireproof motion picture booth. Three entrances lead from the main corridor to this room, making it easily accessible and capable of being quickly vacated in case of fire. On this floor also are several recitation rooms, a chemistry laboratory containing accommodations for 24 students, a locker room, a combination physics and biology laboratory, together with an apparatus store-room located between the two laboratories.

The building is equipped with an electric program clock system, consisting of one large master clock and fourteen secondary clocks. The corridor floors are of gray terrazzo as are also the stair treads. Built-in lockers and display cases add not only to the convenience, but to the general attractiveness of the interior.

The building was erected from plans prepared by Architect Edward Tough of Madison.

The cost of the building complete was \$130,000. The cost of the site was \$12,000, and the

cost of the equipment and furnishings amounted to \$8,000.

SCHOOL OFFICIALS MEET IN TORONTO

(Continued from Page 73)

at present several thousand items and a great variety of books must be handled. While, primarily, the efficiency of the schools must be promoted in all purchases, sound business methods must be employed to insure economy in requisitioning, warehousing, and distributing.

Mr. J. S. Mullan of Rochester, suggested that while quality is an essential in school equipment, the quantity of deliveries must be controlled because some school authorities are inclined to ask for supplies whether they are required or not. Mr. Lewis J. Coath of Chicago, in commenting on this, declared that Chicago has a shocking amount of supplies and equipment stored in its schoolhouses. A recent study showed that five million dollars' worth of property is scattered in the Chicago schools, which has been unused since delivery as long as three or four years ago.

The second paper of the session was a detailed description of the payroll procedure and salary control in use in Chicago. Mr. C. E. Gilbert, secretary of the Chicago board of education, who developed this system, showed that a complete check is essential to handle the very complicated problem of determining the amounts due teachers and other school employees. Mr. Coath, in commenting on Mr. Gilbert's paper, spoke of the thirty-three years' work which Mr. Gilbert has done and of the necessity of developing efficient executives within the school system. Mr. Coath's remarks will be published in the July number of the JOURNAL.

The convention enjoyed a remarkable sight-seeing tour through the city of Toronto on Thursday afternoon. The closing feature of the tour was a bit of typical Canadian hospitality in the shape of a tea served in the magnificent new Central Technical School.

On Thursday evening the convention resolved itself into two round tables—one for the discussion of "small city" problems of financing, purchasing, and general business management, led by Mr. F. P. Rodgers of Jamestown, N. Y., and a second on "school building and maintenance problems," led by Mr. J. D. Cassell of

Philadelphia. The latter round table resulted in a report, read by Mr. J. D. Cassell on Friday morning asking that the committee be enlarged to ten members to study the standards of building construction and maintenance, and to set up these minimum standards in a definite report.

The round table of small cities brought out valuable information on the purchase of school supplies and on the routine handling of school bond issues. It developed also that the majority of school board secretaries in the smaller towns have large responsibilities and are decidedly underpaid as compared with professional school executives, teachers, and principals.

The Business Meeting

The Association has for some years considered the advisability of a cooperative service exchange on school furniture and equipment for the purpose of making known to its members prices and other details of the purchase of furniture, etc. A committee which has been working two years on the project, reported that the exchange is necessary and can render a valuable service, and that means are at hand for bringing the information to the attention of secretaries. Indifference and a lack of cooperation on the part of the majority of secretaries and business managers, however, led the committee to recommend that nothing be done for the present, and that the committee be discharged.

The annual election of officers resulted in the unanimous selection of the following men for 1926-27: President, John B. Wynkoop, Business Manager of the Board of Education, Bridgeport, Conn.; First Vice-President, H. L. Mills, Business Manager of the Board of Education, Houston, Texas; Secretary, John S. Mount, Inspector of Accounts, Trenton, N. J.; Treasurer, Henry W. Huston, Auditor of the State Board of Education, Trenton, N. J. The incoming president was authorized to appoint second vice-presidents from various sections of the country to co-operate with him in promoting the work of the Association.

The Association changed its constitution and by-laws in such a way that local, sectional, and state associations of school board officials, charged with business management of schools, may be eligible to membership in the Association. The first organization to be admitted was

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that of the Southern California Association of Secretaries. A plea was made from the floor for the organization of similar associations in various parts of the country and for their affiliation with the national body. Every section in every state has its own peculiar problems, and organizations of secretaries and business managers which meet frequently for the exchange of experiences and ideas, will not only solve problems and advance local welfare, but can benefit immensely from the work of the national association. Incidentally, such local organizations can become the strong right arm of the national association in carrying into the states and into state legislatures the splendid movements inaugurated for uniform accounting, for better standards of school building construction, etc.

The Resolutions Committee presented resolutions of regret on the death of several members and expressed the hearty thanks of the association for the hospitality received at the hands of the Toronto school authorities. In all its experiences, the association has never received such constant and splendid attention as was given by Mr. C. E. C. Dyson, architect of the Toronto board of education, and by members and officers of the Toronto school system. A resolution declaring that it would be inadvisable for the association to express itself on the Sterling-Reed bill was sustained after a spirited discussion.

The members of the association who visited Toronto and Canada for the first time were enabled to study at close range a school situation which is altogether unknown in the United States, and which is an example of the Canadian idea of fair play and democracy. The city of Toronto has a public (elementary) school system for the children at large, and a separate school system maintained and paid for by the Catholic rate-payers. Out of a total population of 550,000, the city has 60,000 Catholic people and 12,000 children in the separate schools. The cost of conducting these schools is \$54 per capita as compared with an \$83 per capita cost of the general public schools. All tax-payers, including corporations, may elect to pay taxes for the public schools or for the separate

schools, according to their religious belief and personal desire. While the public schools cost more per capita than the separate schools, the rate of taxation for the latter is considerably higher. Children of all denominations may attend the collegiate Institutes, which correspond to our junior and senior high schools, or the Technical Institutes or Commercial Schools, which correspond to our technical high schools and commercial high schools, respectively.

The school board secretaries and business managers of the United States are a serious, practical group of men and women who are facing the hard realities of financing the schools and of managing the erection and maintenance of school buildings, and the purchase and distribution of school supplies. At the Toronto convention they exhibited not only a splendid professional spirit concerning their work, but also great seriousness in attending meetings, and in sharing with one another information and experiences, methods, etc. The convention, like the previous meetings of the group, was decidedly at variance with the meetings of superintendents and teachers, where a social note frequently prevails and where sometimes, less than the majority of persons in attendance is present at the meetings. Except for one afternoon and one evening, all of the available time, mornings, afternoons, and evenings, was spent in meetings and conferences.

PUBLICATIONS RECEIVED

A Study of the Reading Situation in the Elementary Grades of West Allis, Wisconsin. Prepared by the department of educational measurements, and issued under the direction of Supt. T. J. Jones, West Allis, Wis. In the total test, it is shown that the only grade below norm is the 1-A; the 2-A and 3-B, being exactly equal respectively to the standard 3-B and 3-A. The lower grades are still the weakest measured by the test. It is also shown that on the basis of chronological age, there is not a large amount of over-ageness or under-ageness since the reading results are much the same. On the basis of age standards, grades 5-A and 5-B are similar, while on the chronological age basis, 5-A is better than 5-B. One school stood highest on the basis of score, but on the basis of reading

quotient it was the lowest. Based on the standards set, the West Allis schools on the whole, show satisfactory achievement. On the other hand, it is emphasized that the reading situation is not all that could be desired. The tests do not measure all phases of reading ability and there appears to be a wide scattering of ability in all grades.

Objective Measurement of Information. By Charles W. Odell. Educational Research Circular No. 44, 1926, issued by the University of Illinois, Urbana. It is the purpose of the author to outline briefly the place and the merits of the new examination, to follow this by illustrating and explaining different forms of objective and near-objective tests, and to give directions for administering and scoring them. The pamphlet discusses the basis for choosing examples, the principles of constructing and using objective exercises, and gives examples of objective exercises. The examples do not constitute a test on the minimum essentials of the subject, and practically all of them are original with the author insofar as their exact form is concerned. Many standardized tests, a number of textbooks, and several teachers were consulted in the search for suitable material.

The Accounting of Public Expenditures in Wisconsin. A report submitted by John Guy Fowlkes, V. A. C. Henmon, and C. J. Anderson. Bulletin No. 4, November, 1924, issued by the University of Wisconsin, Madison. The study has stimulated interest in the accounting of school moneys in Wisconsin and has made it possible for the author to devise a system of financial accounting which seems to satisfy the demands of the schools in Wisconsin. It discusses the expenditures reported to the state department, the provisions of local accounting systems, the limitations in systems of accounting for school expenditures, and the accounting for school expenditures with uniformity and accuracy.

Nature Trails. By Frank E. Lutz. Publication No. 21, 1926, of the American Museum of Natural History, New York. The present pamphlet represents the results of an experiment in outdoor education.

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a wide variety of finishes with seats of wood, leatherette or tapestry in harmonizing shades.

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FIVE-YEAR GUARANTEE. The steel frame of Clarin Chairs is guaranteed for a service of five years or more and will be replaced if damaged or unsuited for service at any time through defective workmanship or material.

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BOOK REVIEWS

Seeing America—Mill and Factory

By W. B. Pitkin and H. F. Hughes. Cloth, 333 pages. The Macmillan Co., New York, N. Y.

As a supplementary reader for upper-grade classes in geography, the present book is novel and effective. Two boys chase a swindler who is imposing on industrial concerns, and in the course of their travels, visit flour, paper, steel and textile mills; automobile, phonograph, rubber, glass and drug factories; a motion picture studio, a packing house, a sugar refinery, an electric power house, a pottery, etc. Descriptions are graphic and the illustrations are well chosen.

Educational Story Plays and Schoolroom Games

By Emily W. Elmore and Marie L. Carns. Cloth, 145 pages. Price, \$2. A. S. Barnes Co., New York, N. Y.

In this book the authors have made an effort to use only material which is really educational as a means of linking up schoolroom subjects with physical education and to show the close relationship between them, as well as their interdependence.

The material involves story plays, poems having intrinsic merit, familiar nursery rhymes, stories found in school readers, mythological tales, and historical or geographical subjects which have been selected as worthy of dramatization. Schoolroom subjects have been chosen for many of the games to act as a supplement to classwork. These furnish an interesting means of reviewing the various subjects and of stimulating the minds of the pupils through combining physical and mental activity. The games are to be played during the physical education period and aim to show the possibilities for exercises in the schoolroom. The games may also be incorporated in the regular classroom work where physical education is not a definite part of the school program. The book discusses the purpose and teaching of educational story plays, the nature and use of educational story plays, and schoolroom games, and

includes a complete index to all the material offered.

Scott's Woodstock and Kenilworth

By E. C. Abbott. Paper, 40 pages. Price, \$0.15 ea. Published by the Oxford University Press, American Branch, New York, N. Y.

These selections from English literature have been dramatized for school use. They will be found of help in preparing programs involving school plays and entertainments.

Permanent Play Materials for Young Children.

Charlotte G. Garrison. Cloth, 122 pages, illustrated. Charles Scribners Sons, New York, N. Y.

In this book is given a clear and commonsense statement of the principles which should guide in the selection, use and care of permanent play materials for nursery schools, kindergartens, and primary grades. The materials and methods presented have grown out of experiments conducted for more than a decade in the Horace Mann School.

The author brings out the fact that toys and play materials should represent good workmanship in that they are to stand the normal wear and tear of little unskilled hands in the process of learning control. Economy requires durability which depends in turn upon good workmanship or manufacture. While productive work requires good materials and tools waste in play comes from poor equipment. The high schools are equipped with laboratories for science, shops and tools for technical training, and with libraries for reference and information. It is proper also to recognize the right of the young child to equipment that lifts his play and work to higher levels of development and achievement.

The material in the book should prove helpful to teachers in providing supplementary work for young children. It may also be of use in the home nursery where the children often work without guidance and with full freedom to work out their own problems.

Drill Exercises and Practice Forms for Letter Writing

By H. C. Moeller and E. J. Stout. Published by Matt Parrott & Sons Co., Waterloo, Ia.

This material has been prepared in the belief that letter writing can be made interesting and

attractive by using real stationery, and by using or creating situations that present an actual need for writing letters.

The exercises supplement, but do not displace the letter writing in the pupils' ordinary language texts. Emphasis has been placed on form and material. The model exercises are accompanied by three kinds of stationery and envelopes suited to the ordinary uses of letter writing, and the work is intended to be suggestive as to content.

The course has been worked out with the idea that the pupil shall complete an exercise a day. No exercise may be left until the child has covered it fully and completely. A total of 54 exercises are included, covering friendly letters, business letters, and invitations. The suggestive forms and exercises make the material readily usable in any grade, in high school, or college.

The Hygienic Pig

By Janet Field Heath. Cloth, 112 pages. Illustrated. Price, 70 cents. The Beckley-Cardy Co., Chicago, Ill.

This is a story book for small children. It tells about a hygienic pig that enjoyed being clean, and a big black bear that did some interesting things. Then follow a number of stories on various subjects. The field mouse, a little old man, birthday roses, a big railroad train, and a circus, all come in for attention.

The book is handsomely illustrated and the text is set in large and legible type.

The Mind

By John X. Pyne, S.J. Cloth, 382 pages. Price, \$2. Benziger Brothers, New York City.

This book is a general introductory work intended as much for the general reader as for the undergraduate who is taking up the subject for the first time. It is a very thorough restatement of scholastic philosophy in the language of the present day psychologist, without the old formalism and pedantic lack of application to modern life. Part one takes up national psychology, part two phenomenal psychology. The book will disabuse the reader of many mistaken notions and prejudices which are current concerning scholastic psychology.

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Food Study for High Schools

By Mabel T. Wellman. Cloth, 528 pages. Little, Brown & Co., Boston, Mass.

Home economics is now a well established subject in high schools, but in too many it is merely cooking and sewing, without an intellectual appeal.

This book is a little out of the ordinary in that it is a manual of definite directions and information which aids not only in preparing the student for future home making but which is of immediate use in interesting her in health and her part in a health program. The book is an entirely new text, utilizing the best material of an earlier book by Miss Wellman, and presenting the subject as a whole in the light of the development which has taken place in the past few years.

In the preparation of the book the material has been broken up into paragraphs under definite subheadings. An attempt has been made not to give less information but to present it more simply; to leave out material deemed unnecessary, and to plan for constant home practice as well as other out-of-school work.

The advantages of food for health have been brought into greater prominence and the order of lessons has been changed to bring simple caloric work and meal planning into greater popularity. The table of caloric portions has been replaced by a table of calories from servings which simplifies the arithmetical calculations. Tables of the vitamin and mineral content of foods have been added and height and weight standards, as well as food standards, have been brought up to date.

In the arrangement of the book the order of the topics is not that of the average cook book but is a logical working out of the subject, making possible certain advantages in presentation. It includes recipes and topics to be reported upon, making the girls more observant and more interested in the work carried out. The arrangement of material takes into consideration the time of the year and the ease with which certain food materials may be obtained in any particular locality.

The book opens with a chapter on the cooking of fruits, canning and jelly making which comes early in the fall. The cooking of meats and the baking of bread, cake and pies are under-

taken before the end of the school year, while the weather is still far from hot. Near the end of the year such work as light desserts, milk, and articles made from milk are undertaken, together with a study of balanced diets and the cost of food.

The book contains a number of standards and tables for listing actual weights of persons and for indicating the proper caloric portions of food and the relative amounts of vitamins.

Easy English Exercises

By Ada Riddlebarger and Edna P. Cotner. Cloth, 271 pages. Price, 96 cents. World Book Co., Yonkers, N. Y.

This book is a swing back of the pendulum from the extreme type of sugar-coated grammar in which composition, oral work, etc., are combined and correlated with other subjects in the curriculum. It avoids also the old-time, formal grammar which was a bugbear and failed largely in its habit-training and in its application to the child's usage in school and out of school. In fact, habit formation based upon a simple understanding of fundamental principles and good practice is the strong element of this book. Every fact of grammar is fully illustrated with numerous, simple, well chosen, practice sentences which are remarkably free from confusing elements, short, and practical. The entire range of work for the upper grades is completely covered with ample material for fast, as well as medium classes.

Trail Makers

By Zoe Meyer. Cloth, octavo, 217 pages. Little, Brown & Co., Boston.

Fourteen stories of wild folks of the northern woods, describing their habits, haunts, and their battle for existence, make up this interesting volume. Children from 11 to 13 years will find it a source of pleasant, informative reading.

The Essentials of Commercial Law

By Wallace Hugh Whigman; 385 pages. Illustrated. Gregg Publishing Co., New York City.

This is a revision of a book first brought out some thirteen years ago. The author has introduced many improvements over his former work. He has a clearer division between the things of law that should be within the grasp of every man and those that must be referred to a competent lawyer. He has also given greater con-

sideration to the element of uniformity in statute laws. He directs attention to tested facts in order to establish rights.

The course is planned to teach the student proper caution, accuracy, and the legal principles that must guide him in reaching conclusions. In the forty-odd chapters every essential phase of business transactions involving knowledge of law is covered. The meaning of the documents employed in commercial pursuits is explained.

Science Readers for Silent Reading

Book VI—Early Men of Science. By Wm. L. Nida and Stella H. Nida. Cloth, 240 pages. D. C. Heath & Co., Boston.

Glimpses of the most interesting facts of the great natural sciences, and a dip into the history of scientific discovery are provided in this book through the lives of the great scientific discoverers. Here we read of Galileo and his telescope, Herschel and the planets, Newton and his apple, Audubon and the birds, Burbank and his plant wizardry, Niels Hansen and his voyages of plant discovery, Jenner and smallpox, Pasteur and his discoveries of germ life, Gorgas and yellow fever—and other similar interesting men.

The story of Galileo—the first in the book—is incorrect and fails to evaluate the slenderness of his scientific findings. Incidentally it fails to mention entirely the independent discoveries of Kepler who had better scientific proof of his theories and who was treated by the Protestants in Germany as severely as was Galileo by the Catholics in Italy.

In these days of motion pictures and radio, the present book is a bit archaic and tame. The editing has been carefully done with English schools in mind.

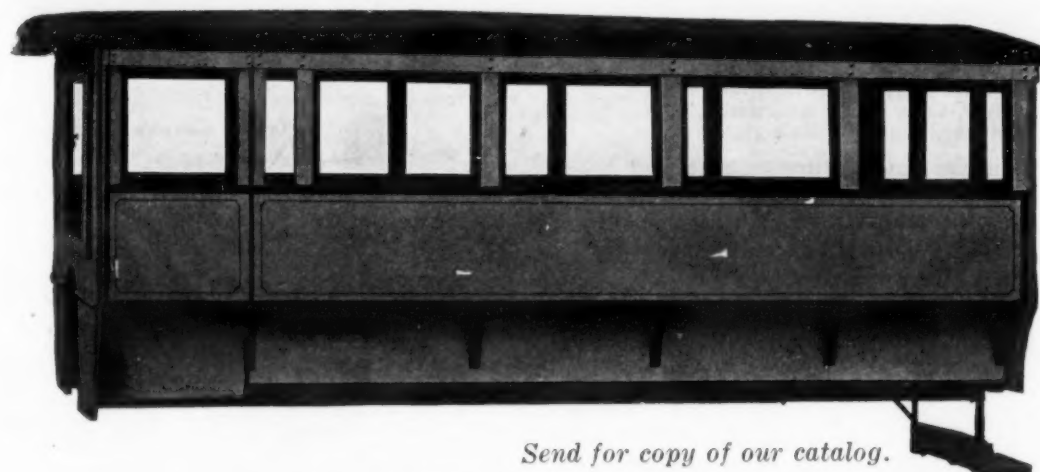
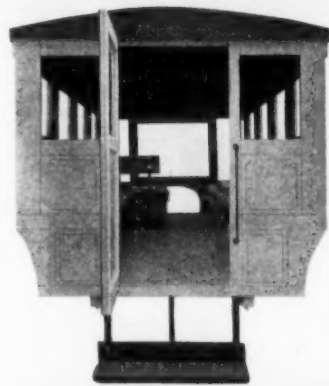
A Neglected Factor in Education

By George E. Walk. Paper, 80 pages. Published by the Gregg Publishing Company, New York City.

This monograph argues the vocational and avocational value of shorthand in the high school, its exploratory and prevocational value in the junior high school, and its "thought provoking and economical value as an adjunct to longhand in the grades."

(Concluded on Page 169)

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(Concluded from Page 166)

Famous Men of Science

By Sarah K. Bolton. Cloth, 343 pages, 8vo. Price, \$2, net. Illustrated. Thomas Y. Crowell Co., New York City.

A series of life sketches. The book is not critical; every one of the famous men is a hero in everything and there is little or no indication of the groping, slender factual basis of some of the theories and hypotheses, or of the later discoveries which have upset so many of the earlier findings.

Chemical Calculations

By Bernard Jaffe. New-World Science Series, edited by John W. Ritchie. Cloth, octavo, 175 pages. Price, \$1.28. World Book Co., Yonkers, N. Y.

The mathematics of chemistry has been commonly neglected in the anxiety of teachers to impress general facts and to cover the prescribed courses of demonstrations and experiments. The present book has an appeal as a supplement to any thorough course for advanced chemistry in secondary schools. Principles and applications are provided in logical sequence and while it is a book of mathematics, it is chemistry which is primarily taught. A large number of problems, college and regents' examinations, handy tables, etc., are provided.

The book will relieve teachers of the heavy load of developing problems, and enable students to strengthen their outstanding weaknesses. It will also make clear the importance of quantitative data in chemistry and help motivate what is considered one of the least interesting parts of chemistry.

The Pathway to Reading—Fourth Reader

By Bessie Blackstone Coleman, Willis L. Uhl and James Fleming Hosie. Cloth, 313 pages. Published by Silver, Burdett & Co., New York City.

The names of the authors of this latest addition to the "Pathway" readers are ample guarantee that the objectives of both oral and silent reading, the suitability and difficulty of the materials, and the teaching devices necessary to make the book effective—have all been provided and tested.

The book is splendidly balanced and carefully studied with rather strong emphasis on silent

reading, projects, and socialized recitation. The selections have been taken largely from modern authors and have been grouped in biographical, civic, play, geographic, nature study, work sections. Projects for study, thought, and individual activities follow each group or section. The illustrations are quite in keeping with the spirit of the book.

The Middle Country

By Olivia Price. Cloth, 176 pages. Price, \$1. The World Book Company, Yonkers, N. Y.

The sub-title of this book "A Chinese Boy's Adventures in His Own Land" gives a clue to the content and style of this interesting geographic reader. The little 10-year old, Oong Bing, who is the central figure of the narrative, travels from a village where a rice harvest is in progress, to Soo, the beautiful city, and then successively to Shanghai—and a tea farm near Hangchow—he travels via the Grand Canal to Huchon and the silk country; he goes north to Nanking and Chufu, and finally to the Capital, Peking. In the course of his travels he witnesses many typical Chinese customs and events and comes into close contact with its bright and its dark sides of life.

The author has a keen insight to Chinese life and character and tells her story with a sureness and deftness that is only possible from long association with the Chinese and long experience in telling children about Chinese customs. She is in spots more sympathetic for the people she describes and more complacent concerning certain habits and customs of which we do not approve, than would seem desirable for telling to American children.

Mechanically the book is a gem of American textbook making. The typographic layout is distinctive and the illustrations are characteristic in subject matter and treatment.

Stories for Junior High Schools

Edited by William Rabenort. Cloth, 416 pages. Published by Charles Scribner's Sons, New York City.

Seven literary gems make up this volume of nineteenth century short stories and tales. Every teacher will appreciate their especial adaptability to junior high school use when the list is given: Dickens' Christmas Carol and

The Cricket on the Hearth, Irving's Rip Van Winkle, Hawthorne's The Great Stone Face, Hale's The Man Without a Country, Stockton's The Lady or the Tiger, and Andrews' The Perfect Tribute. Ample introductory biographical notes, explanations of allusions and unusual words, and projects for classroom use make up useful teaching aids.

Algebra

By William Raymond Longley and Harry Brooks Marsh. Cloth, 577 pages. The Macmillan Co., New York City, N. Y.

This complete course for high schools follows the basic principles set down by the National Committee on Mathematical Requirements and the latest pronouncement of the College Entrance Board. It carries the work definitely into the field of trigonometry in connection with the study of ratios. Carefully graded problems are provided.

Practical Social Science

By John A. Lapp. Cloth, 371 pages. Published by the Macmillan Co., New York City, N. Y.

The author, believing that theoretical sociology is not within the province of a high school course, proceeds to familiarize his students through the more practical route with the elements of social science. He not only presents a variety of social data, but seeks to develop discrimination in the use of social information.

The book is divided into four parts, the first dealing with the Citizen and Society, the second with Protection and General Welfare, the third with Social Welfare and the fourth with Community Work. Under each heading a series of illuminating graphs, charts, and statistical tables are supplied.

Part one enfolds the study of social science in a lucid manner and then treats with subject of population and its distribution, with the migration of people and the occupations engaged in. The immigration tables here provided are most instructive.

In part two the student is given a comprehensive view of the nation's production ability, and its gainful occupations. Agriculture, manufacture, mining, transportation and communication are adequately dealt with. World commerce, too, is fully explained. The country's natural

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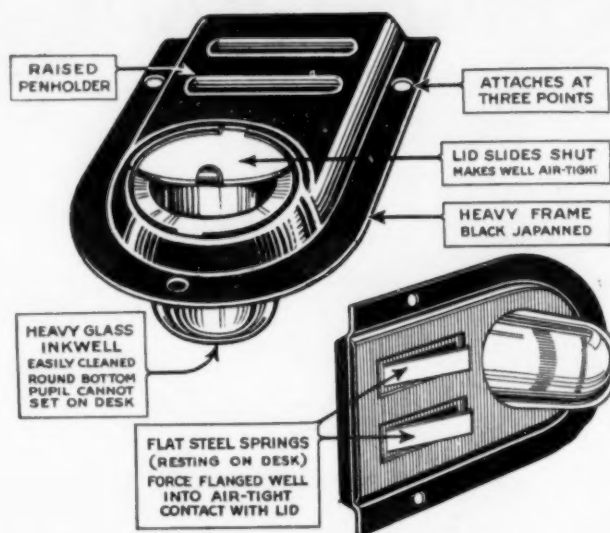
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resources receive adequate attention.

Social welfare forms the basis of part three. Education, health, housing, income, and standards of living are here discussed. The causes and prevention of destitution are explained. Part four concerns itself with local, state and national government. Through a series of charts the student is given an idea of the distribution of taxation over the several political units.

"Word Study and Its Application," by Frederick J. Fordrunk, has recently been issued by the Alexander Press, of New York City. The booklet sells for ten cents and follows the course of study outlined in the New York City syllabus.

Program of N. E. A. Meeting, Philadelphia, June 27-July 2

- CONVENTION PROGRAMS**
Sunday, June 27
7:30 P. M. General session in Exposition Auditorium.
Monday, June 28
8:30 A. M. General sessions.
2:00 P. M. Meetings of departments and allied organizations.
7:30 P. M. General session in Exposition Auditorium.
Tuesday, June 29
8:30 A. M. First business session of the Representative Assembly.
General sessions for persons not participating in Representative Assembly.
2:00 P. M. Meetings of departments and allied organizations.
7:30 P. M. General session in Exposition Auditorium.
Wednesday, June 30
8:30 A. M. Second business session of the Representative Assembly.
General sessions for persons not participating in Representative Assembly.
7:30 P. M. General session in Exposition Auditorium.
Thursday, July 1
8:30 A. M. Third business session of the Representative Assembly.
General sessions for persons not participating in Representative Assembly.
2:00 P. M. Meetings of departments and allied organizations.
7:30 P. M. General session in Exposition Auditorium.
Friday, July 2
8:30 A. M. Fourth and final business session of the Representative Assembly.

Of Interest to School Purchasing Agents

The Bureau of Standards of the U. S. Department of Commerce has issued some government master specifications that are of value to school authorities in specifying and purchasing materials for school use. The three most recent specifications are as follows:

Specification for Ink, Drawing, Colored Waterproof — Federal Specifications Board

Specification No. 379. General requirements and a method of inspection and tests are presented.

Specification for Shellac, Flake Orange—Federal Specifications Board Specification No. 375. General and specification requirements and methods of sampling and testing flake orange shellac.

Specification for Varnish, Shellac—Federal Specifications Board Specification No. 376. Complete details for specifying, sampling, testing, packing, and marking shellac varnish.

Each of these documents may be purchased from the superintendent of Documents, Washington, D. C., at five cents per copy.

Receive Gift of Residence for the Principal

Coincident with the dedication of the Community High School at Marengo, Illinois, there was recently presented to the school district by

Mrs. Josie Curtis, a fine dwelling to be used as a residence for the principal.

Mrs. Curtis had for many years been a public-spirited woman and had been continually doing good in her community. Among other things, she noted that whenever a new superintendent came into town, it was almost impossible to find a suitable home in which to live. She believed that in giving a good residence to the school district, she might not only help the local situation but prove an inspiration to someone in another community where a like situation existed.

The residence given by Mrs. Curtis is located in a fine section of the city. It is located on a three and one-half acre tract of ground, has seven rooms, and is well built in every way. It was the home of the donor and her husband for many years, and it should prove a means of satisfaction to any superintendent who may come to the town in the future.



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Murdock
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made of
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BRASS
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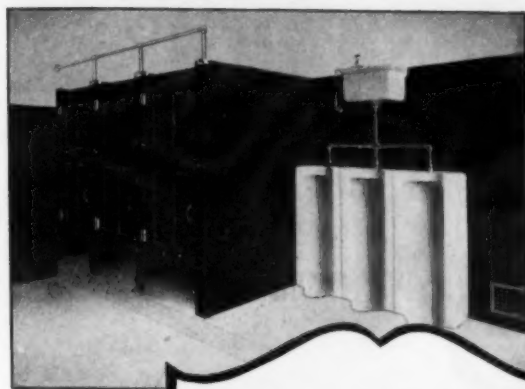
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(Concluded from Page 153)

more (New York figures not given, however) had a bonded indebtedness for school building purposes of \$18,582,969. Chicago has a similar indebtedness of only \$214,000.

City	Bonded Indebtedness for Building Purposes
Detroit	\$36,767,000
Cleveland	28,585,972
Philadelphia	28,587,000
Los Angeles	24,799,576
Pittsburgh	16,269,900
Boston	15,875,000
Buffalo	14,965,000
Baltimore	10,109,640
San Francisco	6,880,000
St. Louis	3,000,000
Chicago	214,000

Chicago authorities have always had convictions against bonding the city for school buildings, and have used the pay-as-you-go plan. Despite the good intentions of the school board, in recent years it has become necessary to make temporary loans secured by anticipation warrants for educational purposes and a floating indebtedness of nearly \$20,000,000 has accumulated. Beginning this year, it is going to be necessary to borrow on anticipation warrants for the building fund as well as the educational fund.

All Chicago schools with fifteen or more divisions (approximately 700 pupil membership or more) have a half-time or full-time clerk in the principal's office. These clerks, or extra-teachers as they are called, were introduced in the days when Ella Flagg Young was superintendent of schools. They have the qualifications of teachers, they are on teachers' pay, and, the principals insist, they do much work similar in character to that required of a teacher. However, they do not teach classes. For the third time within the past two years, the Civil Service commission is trying to assume jurisdiction, oust the extra teachers, and substitute civil service employees. The principals are in opposition to the plan, and are striving to retain their present clerks. They feel that there is a sort of confidential secretarial relationship between the clerk and principal which might not be possible with civil service employees. Besides strictly clerical and stenographic duties, the clerks are said to have many other duties

which could not be expected of a civil service employee without teacher-training, for example, do substitute teaching when a regular teacher is sick or otherwise absent, attend to minor cases of discipline, meet and greet parents with an understanding of school problems involved, score examination papers, and many others. About two hundred extra teachers would be affected in case of an adverse decision. The Civil Service officials are assisted by a recommendation made by a firm of public accountants who made a business survey of the Chicago school system. This firm of accountants is the one which induced the school board to adopt the use of tokens instead of pennies and nickels in the school lunchrooms, and which introduced the signing of the time sheet four times a day by all teachers. No action has been taken by the school board as yet regarding the extra-teachers, but a considerable saving in salaries would be effected by substituting Civil Service employees.

Fifty-three students in Oak Park and River Forest Township high schools have been suspended from high school for one year, because of membership in Greek letter fraternities. The Illinois law prohibits high school fraternities, and the school board and principals seem to be standing firm on their decree, although many of the boys were leading athletes, orators, and all-round students. The students and parents have hired legal counsel and there have been several meetings between representatives of the students and the school officials. The ousted student group has offered to disband their fraternities, destroy their charters, and abide by all school rules, if allowed to return. The school board has refused to compromise to date, and insists that the full-year suspension shall stand.

In January the Chicago School Board adopted a compulsory retirement rule for members of the teaching force who had reached the age of 70. On February 1, 27 principals were transferred to the Emeritus Service.

RETIRING SCHOOL HEAD HONORED AT BANQUET

—O. P. Flower, superintendent of schools of Dubuque, Ia., for the last five years, and who retires on July first, was guest of honor at a

banquet given on May 13th in the senior high school under the auspices of the public school patrons.

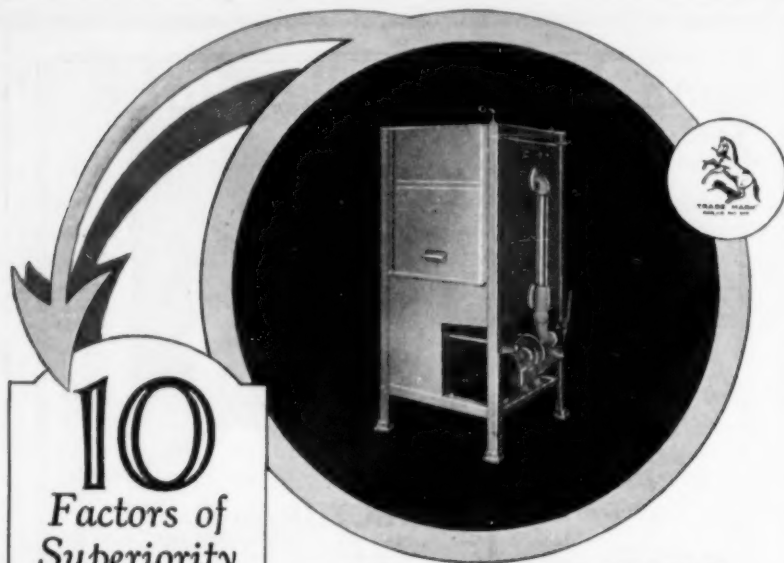
Eight talks and two speeches were made during the evening. Supt. Flower's work was praised by all the speakers who pointed to the progress made by the Dubuque schools during the last five years under his leadership. Mr. W. A. Buettell presided at the first banquet and at the close of the second banquet, Mr. D. D. Welch delivered an address in which he pointed out the changes for improvement accomplished by Mr. Flower.

At 8:30 in the evening the visitors entered the school auditorium, where they were entertained by the school band. This number preceded the general program, which was in charge of Mrs. H. B. Gratiot.

The regular program was opened by Rev. Salzmann. Mrs. J. I. Cary, the first speaker, lauded the efforts of the superintendent and commended him for the courage displayed. Mr. Edgar Champion, as a representative of the student body, also spoke. Miss H. Lindermann commented on the improvement made in the curriculum and building programs, and Mrs. F. W. Trader, in behalf of the parent-teacher associations of the city, gave a history of the association and praised the work of Mr. Flower. Mr. R. P. Roedell, in defining the characteristics of the superintendent, took each letter of the word Flower and gave them significant terms. The last speaker on the program, Mr. Ira Davenport, spoke as a member of the board. The program closed with the singing of "America."

—William E. Stark, superintendent of the Stamford, Conn., schools was retired by a vote of 5 to 4. A mass meeting of citizens was called to protest the action of the school committee. A number of teachers participated expressing confidence in Dr. Stark who assumed the superintendency about three years ago. The inside reasons for the action of the school committee are unknown.

—Carl G. Leech was reelected superintendent of Delaware County, Pa., for a term of four years at a salary of \$5,000. He was given two assistants at \$3,000 a year each.



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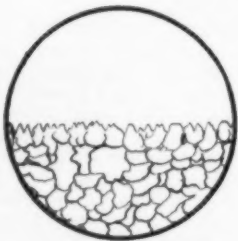
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School Board Journal

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(Continued from Page 191)

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Hoffmann & Billings Mfg. Co.

SIRENS

Federal Electric Company, The

SKYLIGHTS—METAL

Milwaukee Corrugating Co.

SPRAY-PAINTING EQUIPMENT

DeVilbiss Mfg. Co., The

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AND SCENERY

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Beck & Sons Co., The Wm.
Jackson Corp., A. P.
Kansas City Scenic Co.
Lee Lash Studios
Novelty Scenic Studios
Tiffin Scenic Studios
Twin City Scenic Company
Universal Scenic Studios, Inc.
Volland Scenic Studios, Inc.

STAIR TREADS

Alberene Stone Company
American Abrasive Metals Co.
Safety Stair Tread Co., The
Stedman Products Co.

STANDARD TESTS AND SCALES

National Publishing Society

STATIONERS

Blair Company, J. C.

STEEL CASINGS—Doors, Windows

Milwaukee Corrugating Company

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Truscon Steel Company

STEEL SASHES

Detroit Steel Products Company

STEEL STORAGE CABINETS

Durabilt Steel Locker Co.

Durand Steel Locker Company

Medart Mfg. Co., Fred

STEEL WINDOWS

Detroit Steel Products Company

STOOLS, STEEL

Angle Steel Stool Company

SWEEEPING COMPOUNDS

Robertson Products Co., Theo. B.

TABLES

Derby & Company, Inc., P.

Gunn Furniture Company

Hamilton Mfg. Co., The

Mutschler Brothers Company

Rand Kardex Bureau

Rinehimer Bros. Mfg. Co.

TABLETS

American Tablet & Stationery Co.

Blair Company, J. C.

TALKING MACHINES

Victor Talking Machine Co.

TEACHER AGENCIES

Natl. Assn. of Teacher Agencies

Teacher Agencies Directory

TELEPHONE SYSTEMS

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Federal Tel. & Tel. Co.

Graybar Electric Company

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Milwaukee Corrugating Co.

Nelson Corp., The Herman

Neubitt, Inc., John J.

Peerless Unit Vent. Co., Inc.

Young Pump Company

VENTILATORS

American Blower Company

Buffalo Forge Company

Globe Ventilator Company

Knowles Mushroom Ventilator Co.

Milwaukee Corrugating Co.

VENTILATORS—WATER CLOSETS

Bowlus Manufacturing Co., The

VOCATIONAL EQUIPMENT

Buffalo Forge Company

Christiansen, C.

Columbia School Supply Co.

Sheldon & Company, E. H.

Wiese Laboratory Furniture Co.

WAINSCOTING

Stedman Products Co.

WARDROBES

K-M Supply Company

Wilson Corp., Jas. G.

WASTE PAPER BASKETS

Erie Art Metal Company

National Vulcanized Fibre Co.

WATER PURIFIERS

Clow & Sons, Jas. B. (R. U. V.)

R. U. V. Company, The

WATER SYSTEMS

Myers & Bros. Co., F. E.

WEATHERSTRIPS

Athey Company, The

Chamberlin Metal Weatherstrip Co.

Monarch Metal Products Co.

WINDOWS—ADJUSTABLE

Austral Window Company

Detroit Steel Products Company

Truscon Steel Company

Universal Window Company

WINDOW FIXTURES

Columbia Mills, Inc.

Williams Pivot Sash Company

WINDOW GUARDS

American Fence Construction Co.

Badger Wire & Iron Works

Logan Co. (Formerly Dow Co.)

Stewart Iron Works Co., The

WINDOWS—REVERSIBLE

Detroit Steel Products Company

WINDOW SHADE CLOTH

Columbia Mills, Inc.

Du Pont de Nemours & Co., E. I.

Western Shade Cloth Company

WINDOW SHADES

Aeroshade Company

Athey Company

Columbia Mills, Inc.

Draper Shade Co., Luther O.

Du Pont de Nemours & Co., E. I.

Maxwell & Co., S. A.

Steele Mfg. Co., Oliver C.

Wagner Awning & Mfg. Co., The

Western Shade Cloth Company

WINDOW SHADE HOLDERS

Allen Shade Holder Co., The

WINDOW SHADE ROLLERS

Columbia Mills, Inc.

Hartshorn Company, Stewart

Western Shade Cloth Company

WINDOWS, STEEL

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After the Meeting



The Classroom in June

OPEN WINDOWS,
Beyond which are seen blue skies and green leaves.
Bored students,
Thinking of the prom, swimming and tennis,
Notebooks,
Filled with amateur poetry,
Yawning teachers,
Trying to pound knowledge into unwilling heads,
Textbooks,
Their leaves listlessly fingered by wilted hands.
Final exams,
A jumble of meaningless words written by flunking youths.—Chicago News.

In June

"How many more days of school are there?" Susie asked of her brother as they walked home one afternoon.

"Gee, I wish I knew!" returned Bobbie fervently.

"Well, there can't be so very many more," continued Susie.

"How do you know?" inquired Bobbie.

"How do I know?" echoed Susie.

"Don't I keep track of how many times a day my teacher smiles?"—Chicago News.

An Orientalized Application

According to the Michigan Vocational News-Bulletin the following letter is a bona fide copy, written by a Chinese, in applying for a position, to a member of the University Community.

Dr.:

I am Wong. It is for my personal benefit that I write to you to ask for a position in your honorable firm. I have a flexible brain that will adapt itself to your business, and in consequence bring good efforts to your honorable selves. My education was impress upon me in the Peking University in which place I graduated number one. I can drive a typewriter with great noise, and my English is great.

My references are of the good and should you hope to see me they will be read by you with great pleasure. My last job has left itself from me for the good reason that the large man has dead. It was on account of no fault of mine. So honorable Sir, what about it.

If I can be of big use to you, I will arrive on some date that you should guess.

Everybody Worked But Willie

Teacher—"Willie, did your father write this essay?"

"No, ma'am. He started it but mother had to do it all over again."—Life.

Home Truths

The class had had a lesson on Quakers, and for homework were asked to write an essay on those estimable people.

"Quakers," wrote one child, "are a very meek people who never fight, and never answer back. My father is a Quaker, but my mother is not."

Her Ambition

Maisie was being reproached for her bad behaviour by her teacher.

"I hope you don't really mean it, Maisie," said that harassed woman. "I'm sure you want to grow up so that everyone will look up to you."

"No, Miss Jones, I don't," answered Maisie. "I want to grow up so that everyone will look round at me."

NEWS FOR SCHOOL BUYERS

Public Address System. The first public address system for intra-school communication has recently been installed at the William Wilson, Jr., high school at Mt. Vernon, N. Y. The system is used for demonstrating to visiting educators, the application and educational advantages offered by such systems in the modern school.

The apparatus which was installed by the Graybar Electric Company, of New York City, is classified as a 3-A, Western Electric public address system. The system is designed to reinforce the speaker's voice so that it may be heard by everyone, regardless of the size of the audience, and without special effort on the part of the speaker.

The system is equipped with 27 loud-speakers of the cone type, which are located in the class-

JUST 'FORE PROMOTION

(With proper apologies.)

I like to slap the boy in front,
I love to pinch his knee,
And oh, the splendid thrill I get
When Teacher frowns at me!
But once a term I straighten up
And mind; because you see,
It's just 'fore Promotion
And I'm good as I can be.
I love to get my words all wrong,
I like to scribble—Gee!
You oughta see the look I get
When Teacher turns to see
How splashed with ink my paper is!
Then comes a thought—Dear me!
It's just 'fore Promotion
Must be good as I can be!
I take my seat in calm delight
My hands upon my knee,
I answer every question pat
And spell my words with glee.
Yes, just 'fore Promotion
I'm as smart as I can be.
But oh—I'm awful, awful 'fraid
That Teacher sees through me!!
—L. M. Sharpe.

rooms, auditorium, laboratories, gymnasium and shops, so that a speaker or musical program may be heard throughout the building, or in any one group of rooms. The microphone, which acts as the medium for picking up the music or voice of the speaker, is located in the principal's office. All the loud-speakers are controlled by a group of keys.

Palmer Method Pens. The A. N. Palmer Co., publishers of the Palmer Method of penmanship, have issued a series of pens for use in Palmer writing lessons. The pens are numbered from one to nine and are adapted for both fine and coarse writing. For general writing purposes, pen No. 5 is considered very satisfactory, but No. 9 is also a favorite among those who like a medium fine line.

C. A. Dunham Co. Occupies New Building. On April 20th, the new Dunham Building, 450 East Ohio Street, Chicago, was occupied by the Administrative and General Offices of the C. A. Dunham Company. This with the \$100,000 addition to the factory at Marshalltown, Iowa, last year, completes a program laid down five years ago when the general offices were moved to Chicago from Marshalltown.

The Dunham Building is a handsome nine-story structure but a stone's throw from Chicago's Outer Lake Shore Drive, on Ohio Street, on the near North Side. It was designed by D. H. Burnham & Co., and is a splendid addition to the architecture of the locality. The first two floors are of Bedford stone, with five floors of dark red face brick, and top story and attic of buff terra cotta to match the Bedford stone. The architectural treatment is carried out on all sides of the Dunham Building, giving it an unusually striking appearance from all points.

The Administrative Section and General Offices of C. A. Dunham Co., and allied indus-



DUNHAM BUILDING, CHICAGO, ILL.

tries, occupy the three top floors of the new building, where ample light and air insure ideal working conditions for employees.

A striking feature of the Building is the entrance vestibule. The floor is of marble and the travertine stone wainscot, surmounted by a decorative plaster cornice and a coffered ceiling in colors, combine to give an effect of great beauty and richness. Two electric elevators provide high speed transportation to the upper floors.

Needless to state, the building is equipped with a Dunham Vacuum Heating System, with Young Pump, and all radiation is equipped with Dunham Thermostatic Radiator Traps and Dunham Packless Radiator Valves. A battery of oil-fired, low-pressure steam boilers supplies the system with that flexible, easily controlled, and instantly available heat for which the Dunham System is famous in most parts of the civilized world.

Mr. Shigley Joins Warren Holmes-Powers Company. The Warren Holmes-Powers Company, Chicago and Lansing, Mich., has announced the selection of Mr. Arthur R. Shigley, who will have charge of the firm's educational work in connection with the designing and planning of school buildings. Mr. Shigley will devote his entire time to research work for boards of education and superintendents, and will maintain a close bond between school buildings and the best school practice.

Mr. Shigley's long and successful experience in school administration eminently qualifies him to outline objectives for school districts, to indicate the known requirements of building plans and the needs of classroom teachers to realize objectives, and to assist the architect in providing for these needs and requirements.

Van Range Company Purchased by Pick Company. Announcement is made of the purchase of the John Van Range Company by the Albert Pick Company of Chicago. The former has for over half a century manufactured fine kitchen equipment, while the latter firm is the leading hotel outfitter.

The Van Range Company will continue to operate as before and will extend the manufacture of Van kitchen equipment in the direction of the development of further advancement and improvement.

Plans have been made for the erection of a new plant of much larger size than the present, which is to have every advanced manufacturing facility known to science. In this way improved facilities will be offered for meeting the needs of the school customers, and for filling demands for school cafeteria equipment with promptness and exactness.

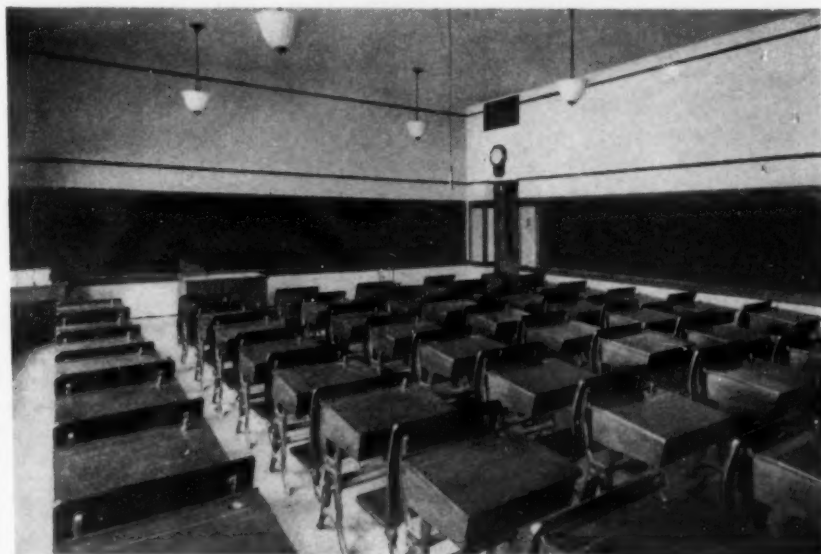
New Soap Dispenser. The Palmer Company of Milwaukee, Wis., has issued its new No. 6 soap dispenser for use in schools and public buildings. The firm has issued an illustrated circular describing the construction and use of the dispenser and pointing out its advantages. The dispenser is leakproof, will not loosen from the wall, is foolproof, and guaranteed to give long service.

The Palmer Company also manufactures the economy toilet paper fixture, the can't spread blackboard eraser, the liquid soap tank system, and the aromazon air conditioner.

Weis Company Moves Factory. The Weis Mfg. Company of Atchison, Kans., has removed its general offices and factory to a new location at Elkhart, Ind. The new location provides space for a complete factory and office building which includes equipment designed for efficiency and increased production. The site has been selected because of its nearness to the source of raw materials, its excellent shipping facilities, and the attractive living conditions for the employees of the firm.

Coincident with the opening of the new factory, was the observance of the fiftieth anniversary of Mr. Henry Weis, president and founder of the company. Mr. Weis has devoted a half century of effort to sheet metal fabrication, which has produced developments and national acceptance of Weisteel products necessitating the expansion.

The modern sheet metal department of the firm was developed fifteen years ago, and each succeeding year has brought not only marked improvements in design and workmanship, but a rapidly growing market. The present Weis company, with its production facilities and experienced sales and service organization, represents a concrete tribute to the ideals and business principles of the founder, and also a capacity for greater and more effective service to architects and builders.



INSTALLED IN 1863 —
AS GOOD AS NEW TODAY!

NATURAL Slate Blackboards erected in 1863 in Philadelphia are still in daily use. This demonstrates the fact that Generations will use the Natural Slate Blackboards you install today. This proves the permanency and economy that can be effected by Nature's own product — Natural Slate.

Natural Slate Blackboards are Fireproof, Sanitary, Dustless, Non-Porous, Easy-to-write-on, Easy-to-read-from, and Easy-to-clean—all laurel-winning features.

You'll find Natural Slate Blackboards in the largest, the most modern, the best-equipped school buildings in the country—for the leaders in the Educational Profession are completely sold on Natural Slate.

Write for interesting data on "All About Slate."

USE SLATE

Stairways, Toilet Enclosures, Urinal Stalls, Shower Stalls, Caps, Bases, Wainscots, Floors, Laundry Tubs, Sinks, Lavatory Tops, Sewage Tanks, Laboratory Table Tops.

NATURAL SLATE BLACKBOARD CO.

108 ROBINSON AVE., PEN ARGYL PA.

University of Idaho, Moscow, Idaho. 386 Columbia Star shades installed October, 1925, in the four University buildings—Shades sold through Geo. Creighton Co. of Moscow, Idaho

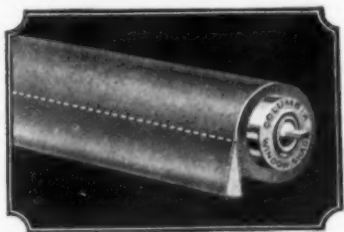


Administration building at left. Science building lower left; Engineering building below; Morrill Hall not shown.



The shades of night are falling fast

Silent operation and long life, due to correct design, careful workmanship and carefully selected materials, are characteristic of Columbia rollers. A spring a third stronger, and rust-proof nickel-plated fittings, are among their good features.



You can save time and trouble and insure shade satisfaction by using the Standard Specification for Window Shades which we'll gladly send on request. A specimen roller and samples of Columbia Cloth are sent with the specification. Just fill in coupon and mail to The Columbia Mills, Inc., 225 Fifth Avenue, New York.

Name.....

Street.....

City..... S-6-26

Time was when window shades were selected to *exclude* daylight. Dark colors, which had little to commend them except that they didn't "show dirt," were the rule.

Today these "shades of night," whether in schools, dormitories or other buildings, are giving way to others of lighter hue,—to *Columbia* shades which prevent glare and mellow the light but do not exclude it. Shades in colors that blend with both interior and exterior, that please rather than offend the eye.

And with shades of better color have come better rollers also—guaranteed *Columbia* rollers built to last in spite of careless use by thoughtless persons.

Every *Columbia* roller has a rugged and practically fool-proof mechanism,

a stronger spring and nickel-plated rust-proof fittings—features which insure dependability and long service under conditions in which failure is most annoying.

A few of the numerous western schools and college buildings equipped with *Columbia* shades and rollers are pictured on this page. These particular *Columbia* shades and millions of other *Columbia* shades, in great variety, are giving satisfaction today the country over.

They will give satisfaction also *in your school*.

The Columbia Mills, Inc.

225 FIFTH AVENUE, NEW YORK
 Boston Chicago Cincinnati Cleveland
 Kansas City Minneapolis New Orleans Pittsburgh
 Philadelphia Portland (Ore.) St. Louis Fresno
 San Francisco Detroit Los Angeles

Columbia

GUARANTEED
 WINDOW SHADES
 and ROLLERS

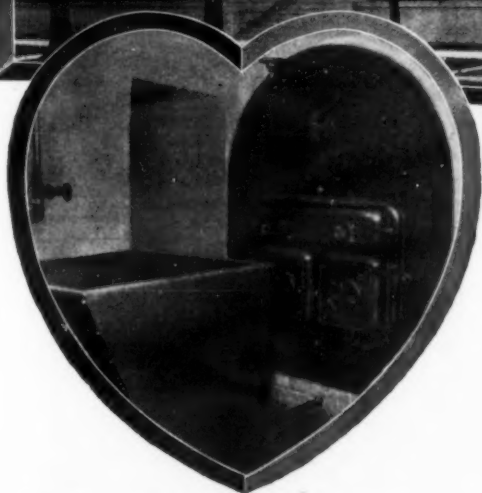
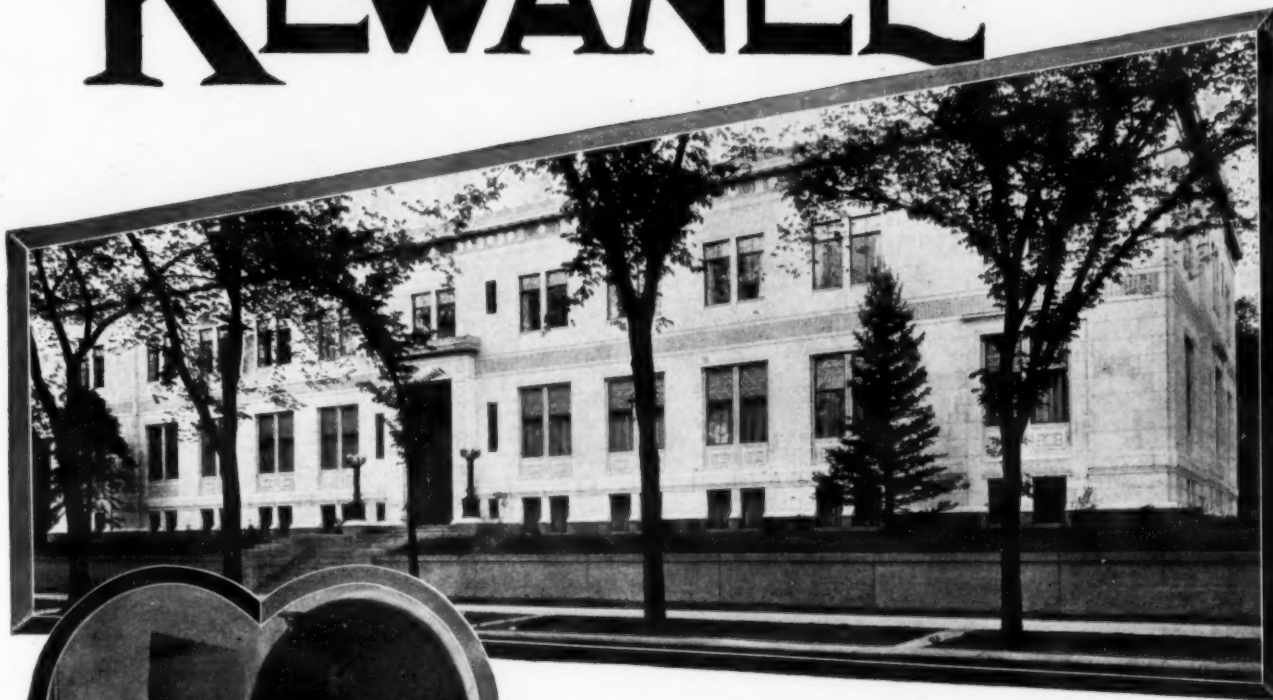


At left: University of South Dakota, Vermillion, S. D. 388 Columbia Arrow and Star shades on Columbia rollers. Perkins & McWayne, Sioux Falls, S. D.—Architect; Freese-Rohde Company, Sioux Falls, S. D.—Shade installation. Picture is of University Auditorium.

At right: Lincoln School, Wilmar, Minn. 171 Columbia Crescent tint shades on Columbia rollers—double hung installation. Edwins & Edwins, Minneapolis, Minn.—Architect; Andrew Peterson, Wilmar, Minn.—Shade installation.



KEWANEE



The Capitol Life Insurance Company

CLARENCE J. DALY, PRESIDENT

Denver, Colorado

Capitol Life Insurance Building heated by one No. 13 Type "K" Kewanee Firebox Boiler with Kewanee Radiation.

Hot water furnished by No. 25 Tabasco Heater with Extra Heavy Kewanee Tank, all installed by Johnson & Davis Plumbing and Heating Company, Denver.

H. J. Manning, Architect, Denver



Strong Heart
takes adventure from heating. The Kewanee Boiler is the sound heart that warms thousands of finer buildings like this bright jewel of the West.

KEWANEE BOILER COMPANY

KEWANEE, ILLINOIS

Steel Heating Boilers, Radiators, Water Heaters, Tanks and Water Heating Garbage Burners



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CHARLOTTE, N. C. 1016 Johnston Building
CHATTANOOGA 1203 James Building
CHICAGO 822 W. Washington Boulevard
CINCINNATI P. O. Box 75
CLEVELAND Superior Ave., N. E. at 17th St.
DALLAS 1903-4 Santa Fe Building
DENVER 1226-1228 California Street
DES MOINES 707 Hubbell Building

DETROIT 2051 West LaFayette Boulevard
EL PASO 226 Mesa Avenue
GRAND RAPIDS 402 1/2 Michigan Trust Bldg.
INDIANAPOLIS 221 Indiana Term. Warehouse
KANSAS CITY 2014 Wyandotte Street
LITTLE ROCK 313-15 E. Markham St.
LOS ANGELES 306 Crocker Street
MEMPHIS 1812 Exchange Building
MILWAUKEE 440 Barclay Street
MINNEAPOLIS 708 Builders Exchange Bldg.
NEW ORLEANS 1018 New Orleans Bank Bldg.

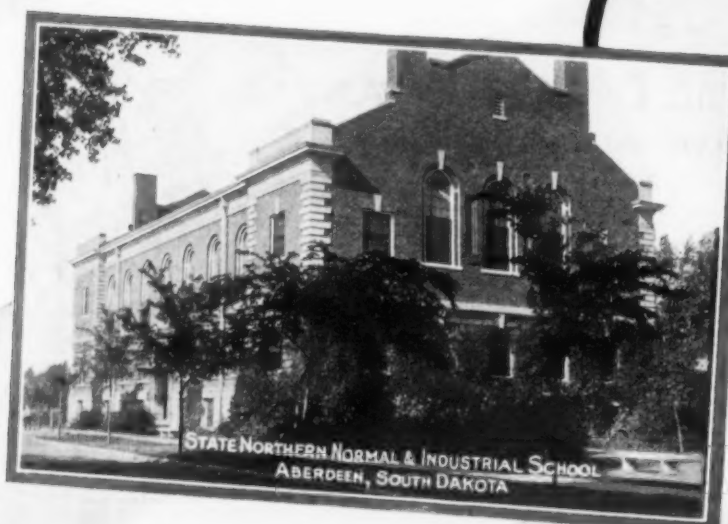
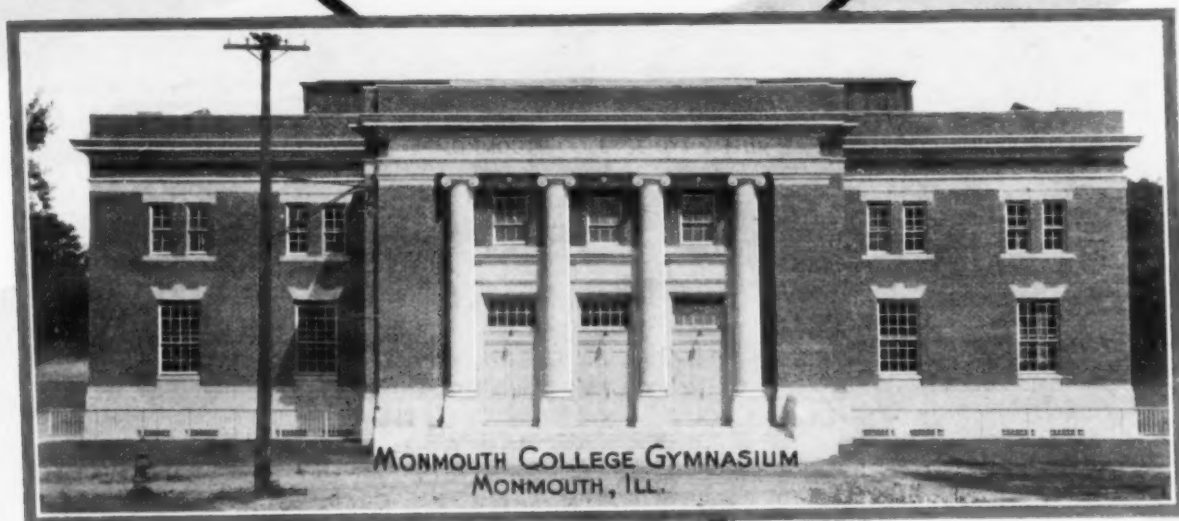
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PITTSBURGH

Proof Products

Glass - Paint - Varnish - Brushes



PITTSBURGH PLATE



Velumina

Washable Wall Paint

is the most modern example of wall finishes — its use results in soft-toned, light-diffusing, cleanly, sanitary walls.

Velumina Flat Wall Paint is ideal for schools and colleges. Dirt and grime cannot penetrate its poreless film. And it can be washed with plain soap and water.

Velumina comes in eighteen beautiful colors, which can be intermixed to any color desirable. The Velumina Color Book, containing fifty-four samples of Velumina colors, will be sent you for the asking.



GLASS CO.

Paint and Varnish Factories
Milwaukee, Wis. ss Newark, N. J.
Portland, Ore. ss Los Angeles, Cal.

Von Duprin

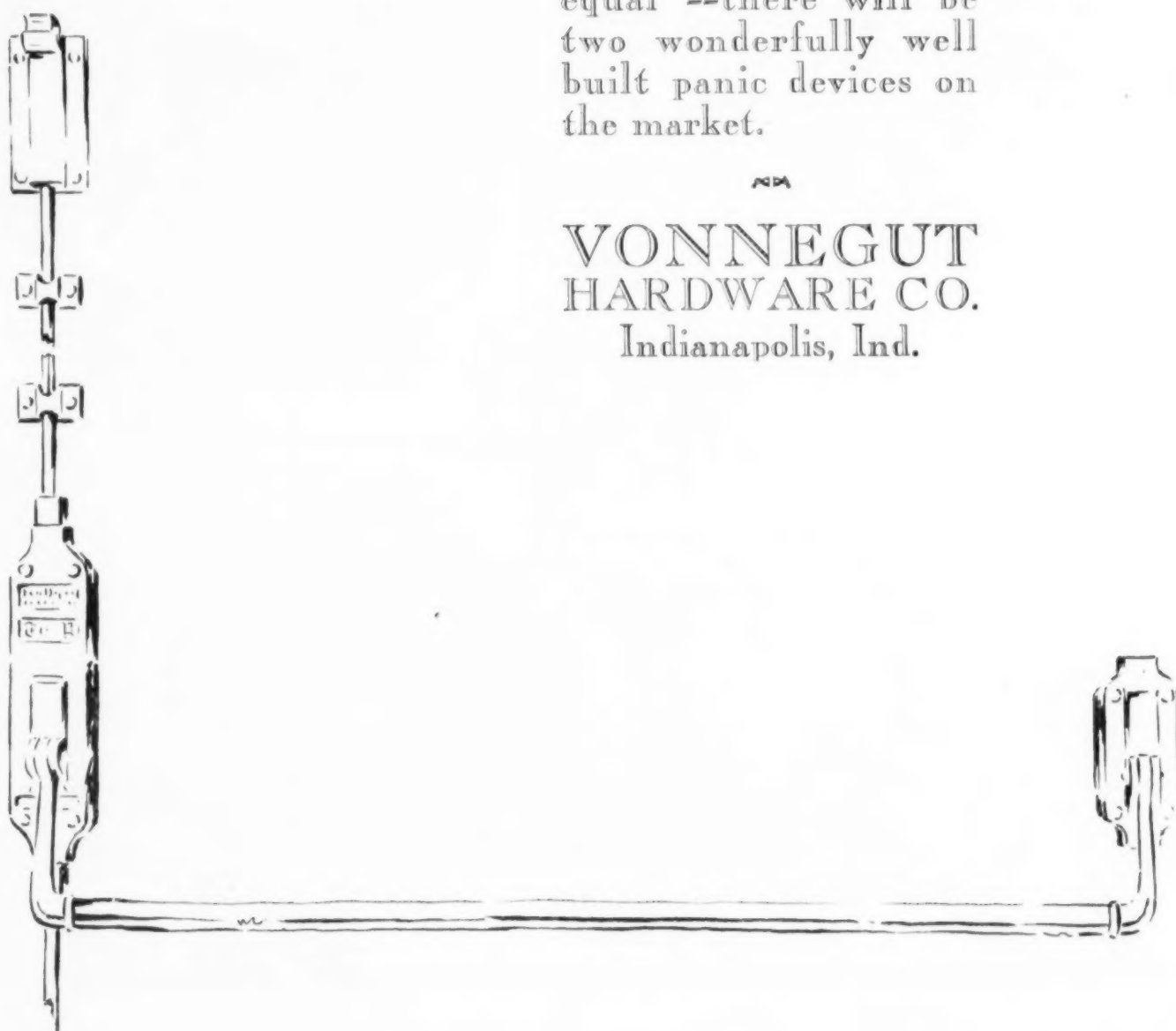
TRADE MARK REG. U. S. PATENT OFFICE

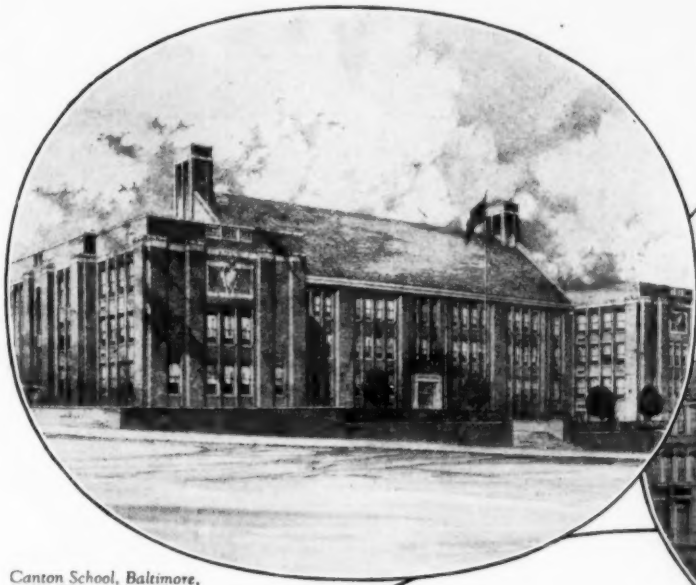
Self-Releasing Fire Exit Latches

If the time ever comes when you can safely specify "Von Duprin or equal"--there will be two wonderfully well built panic devices on the market.

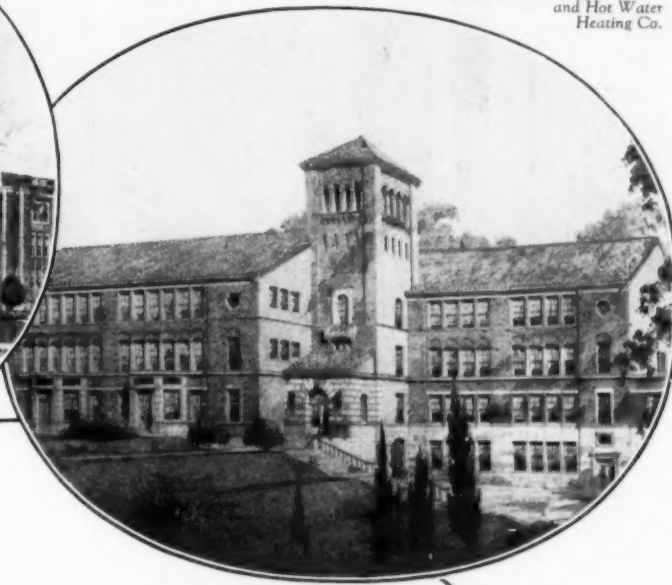
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In Baltimore the moderate and changeable climate creates special conditions which influence heating. Efficiency must be maintained when operating both below and above rated capacity. Quick steaming and flexible fire control are necessary to keep buildings comfortable without wasting fuel.

Pacific Steel Boilers meet these conditions in Baltimore schools for the same reason they have met the conditions of other climates from coast to coast—because Pacific design is fundamentally sound. Direct heating surface is greater than in any other type low pressure steel heating boiler. Combustion space is greater and fire travel longer, insuring maximum combustion.



Pacific Boilers are better boilers for heating school buildings everywhere. Let us send you data on the type in which you are interested.

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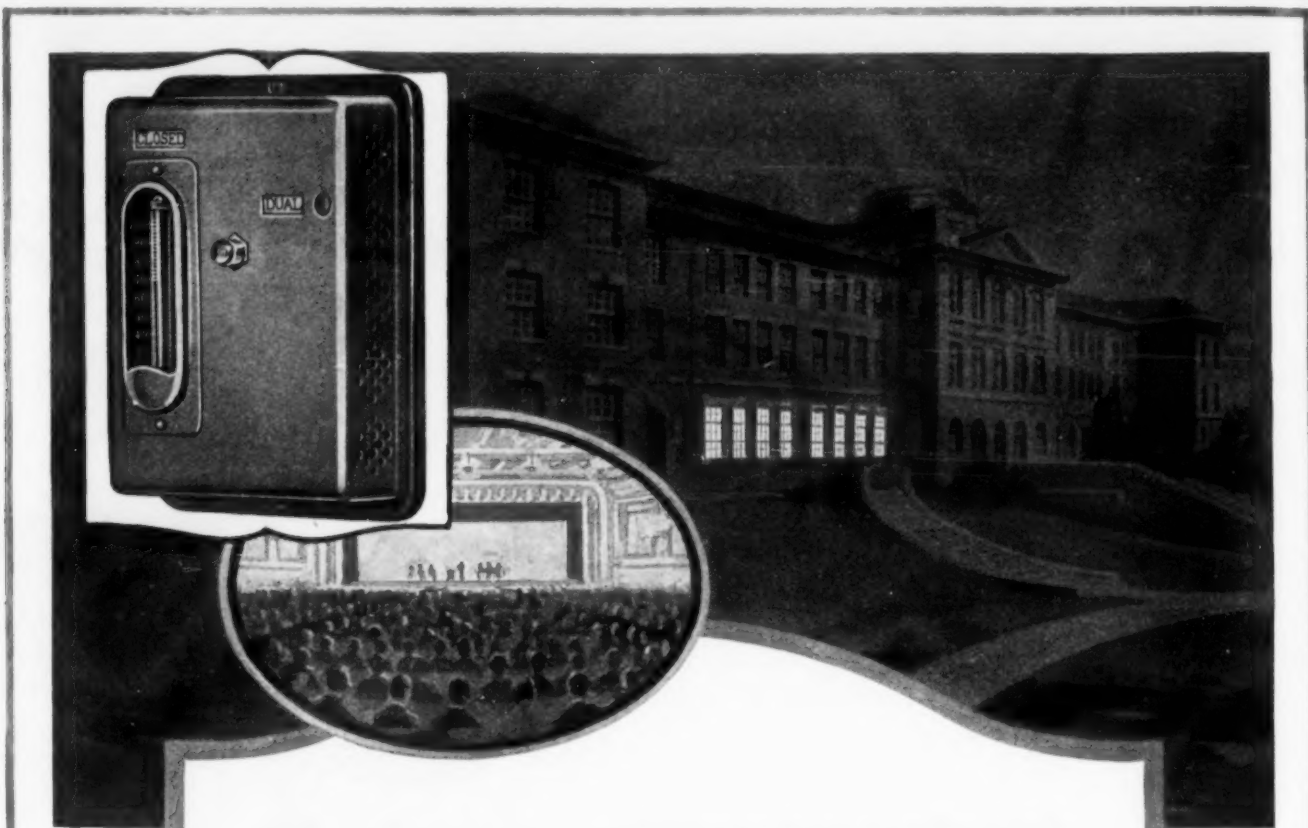
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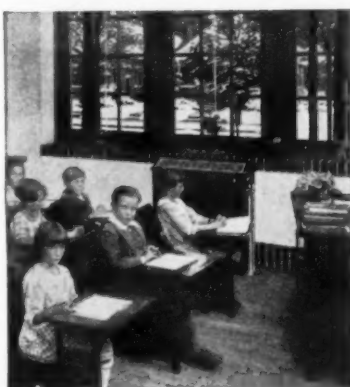
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PARTICULARLY in school buildings, where the floors must constantly combat an unusual amount of foot-traffic wear, T-M-B Flooring furnishes an enduring resilient surface that is without equal.

It can unconditionally be depended upon to render year-after-year service with very little need of attention. Its unusual composition makes it in every way the most desirable flooring to be used in school buildings where extreme demands are made upon floor surfaces.

T-M-B Flooring can be applied with great facility. Once laid it will never warp, crack, scale or disintegrate. Repairs, though rarely required, can be easily and quickly made with exact matching of color. The new application fuses with the old flooring so that no joints or seams are visible.

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Considered from every viewpoint, few other flooring materials offer as much as T-M-B Flooring. The initial investment and upkeep expenses are so low that it demands the serious consideration of every school board that wishes to best serve its community. The reputation that T-M-B Flooring has established in the United States and Canada upholds every claim we make for it—you can secure no better flooring for the purpose, at any price.

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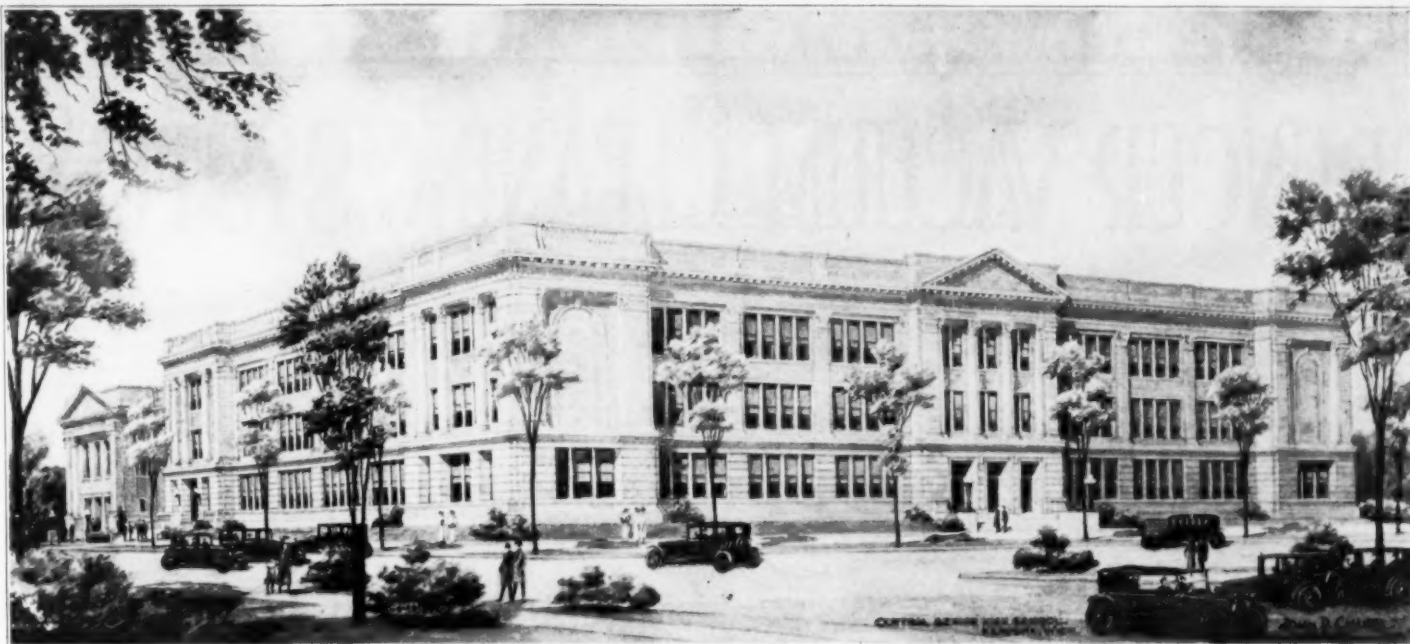
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Oakwood Village High School, Dayton, Ohio, Schenck & Williams, Architects,
30,000 feet in class rooms, laboratories, auditorium and corridors.



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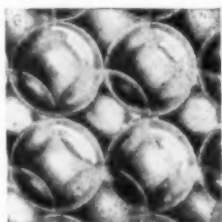


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John D. Chubb, Architect, Chicago, Ill.

*"School Buildings
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The attractive and unusual pattern of Pressed Lens Glass, as well as the entire absence of glare, makes it ideal for ceiling and skylights. It saves students' eyes by giving them full light for their work, and at the same time adds to the distinctive appearance of the building. In corridors its light transmission increases daylight one-third and reduces the cost of artificial light.



ALL Kenosha celebrated, during the week of April 12th to 17th, the formal opening and dedication of its million dollar high school, at which event the architect, Mr. John D. Chubb, of Chicago, was an honored guest.

This model of school building construction might justly be the pride of any community, and conspicuous among its outstanding features **PRESSED LENS GLASS** used for daylight illumination is attracting much attention, and will continue its 100 per cent service long after formalities are forgotten.

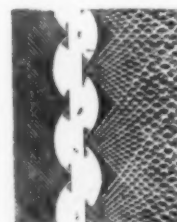
This is only one of many other schools of corresponding size and quality where **PRESSED LENS GLASS** has been used to advantage. Glazed in the exterior upper sash **PRESSED LENS GLASS** gives more daylight on dark and cloudy days and less gloom. It retains its high light transmission from year to year and its perfect cleanability is due to the high polished surface. Endorsed by many leading architects throughout the country, and a source of satisfaction to school boards.

With wire if desired.

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*"Transmits the
Most Light
Without Glare
at the Least Cost"*

Pressed Lens Glass costs less than half as much as plate glass, and is thus made available for very modest school buildings. It is made up in sheets up to 50" x 100", also in 4" x 4" tiles glazed in metal bars and stocked by leading glass jobbers everywhere. We will be glad to send samples and give estimates on request. Let our service men help you!



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The recommendations of our Engineering Department may be obtained on any cleaning problem without cost or obligation.

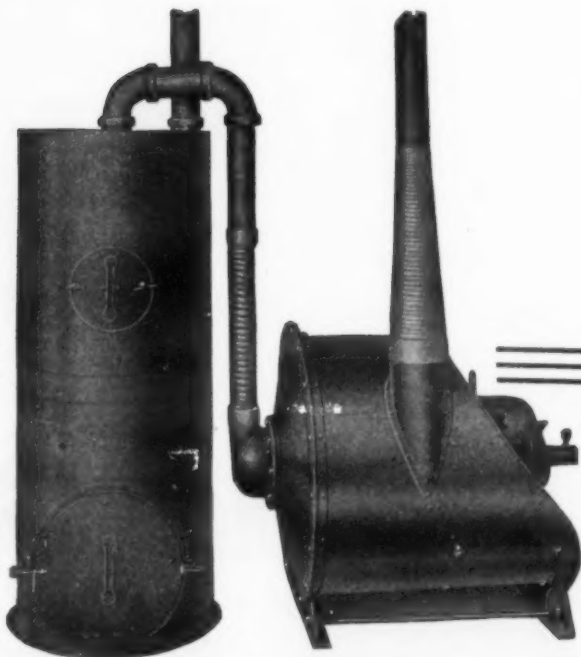
Due in part to the inherent characteristics of the multi-stage turbine and to the correct design and proportions of the system as a whole, Spencer equipment produces the right proportion of vacuum to volume at the end of the hose, for both bare floor work and carpet work, which proportion is automatically changed as often as the operator changes from one class of work to the other. This proportion remains uniform not only for different kinds of cleaning, but also for different distances from the machine, representing the same efficiency on the top floor as on the ground floor.

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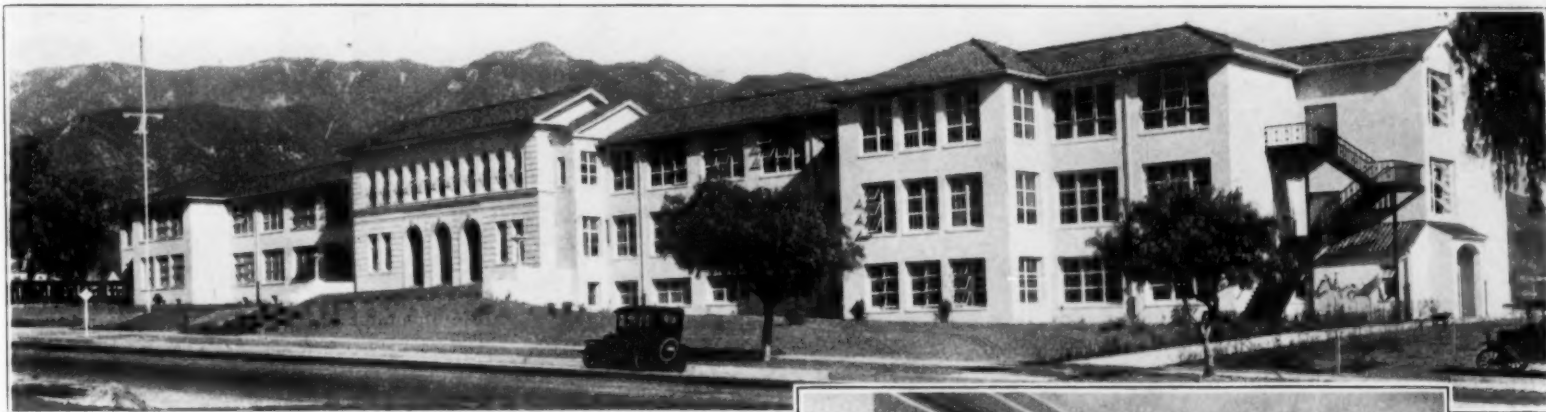
Write for list of school installations and complete data regarding Spencer equipment.

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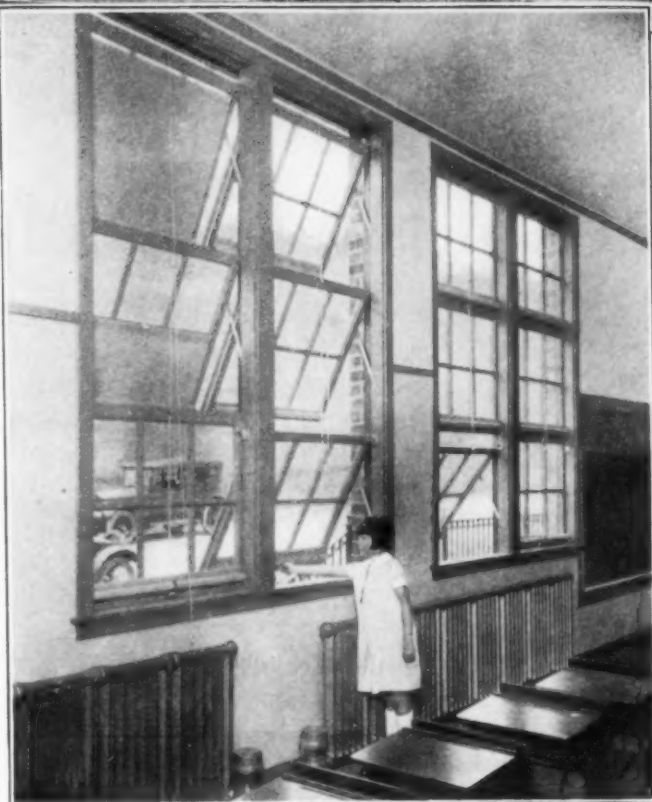
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Have you ever heard the crash and felt the shock of the ball as it strikes the ten pins, when you were passing a bowling alley? That ball goes charging down a polished floor and hits the pins with a tremendous impact.

Think what destructive treatment those pins have to resist. The ball knocks them—they knock each other—they fly in every direction, only to be set up and struck again.

It takes a remarkable wood to withstand such treatment. It must be hard to split, hard to splinter, hard even to dent by blow on blow.

That's why ten pins as well as the floors of bowling alleys are made of Maple. This tough-fibred, heavy, close-knit wood is found wherever brutal treatment demands the best.

You get these same advantages in Maple Flooring. And in schoolrooms, floors are put to the hardest test. Scraping feet—shuffling shoes—the tramp of hundreds of youngsters, in and out day after day, will quickly wear away any

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Floor with Maple, Beech or Birch. All three flooring woods are distinguished by the same characteristics—close, compact graining; freedom from splinters; resistance to wear; cleanliness; and the ability to polish with use. Of course, such flooring provides firm, permanent anchorage for desks.

Floors of Maple, Beech and Birch are also used for beauty. In your home, or in those rooms of the school which need a home atmosphere, you can have the decorative possibilities illustrated in the booklet, "Color Harmony in Floors." Ask your retail lumber dealer for a copy, or write us and receive one with our compliments.

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Guaranteed Floorings

The letters **MFMA** on Maple, Beech or Birch Flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and

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MFMA

Floor *with* Maple

Beech or Birch

"The HEALTH COUNCIL"

Because—in the building of every modern school—health, as well as mental efficiency, of many generations of school children, depend on the decisions of this small group of public spirited citizens (School Board members, Superintendent, Architect)—we refer to them here as "THE HEALTH COUNCIL."



The HEALTH COUNCIL

Selects June Weather as Produced by the American System

WHEN school board, superintendent and architect reach the decision that each and every child in every room shall have fresh air—clean, warm, humidified—then the selection of the American System of Heat with Ventilation automatically follows.

The American System will give your school 96% perfect June weather conditions all year round. Think, members of the Health Council, what that means with regard to the health of the pupils, their attendance, their mental alertness. Think, too, what it means in the efficiency of money invested in building, equipment, teaching staff—for these costs run on whether pupils come or not.

The first cost and operating costs of the American System are low—lower than those of any other system furnishing an adequate amount of fresh, warmed, humidified air.

Any fuel may be burned.

Only as many units as are required to maintain comfort need be fired. No fuel is wasted. The Astesto-Steel casings permit the delivery of 25% more heated air than is produced by brick-enclosed furnaces under like conditions.



Memo to ALL Architects!

While this advertisement features schools, THE AMERICAN SYSTEM is also ideal for any building where fresh, warmed, humidified air is needed in ample quantities at reasonable costs (Schools, Theatres, Churches, Factories, Auditoriums, Public Garages, etc.) Write us for specific facts and call on our engineering department for technical data or actual help in solving your heating and ventilating problems.

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Get all the facts about The American System before your Health Council. Write to the nearest representative or to us.

For forty years one company, through its engineers and its authorized agents, has installed and guaranteed The American System.

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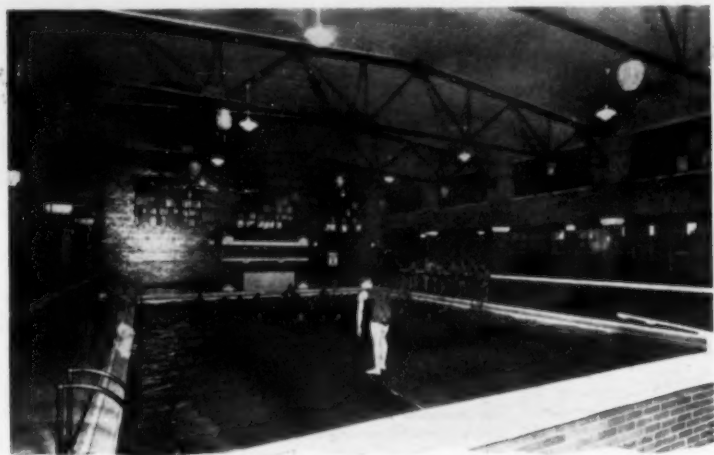
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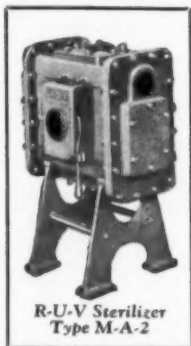
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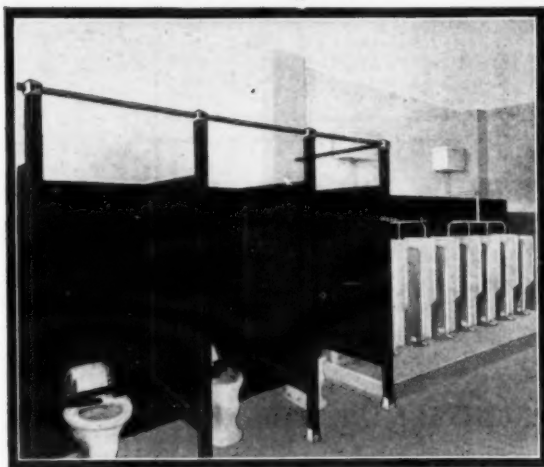
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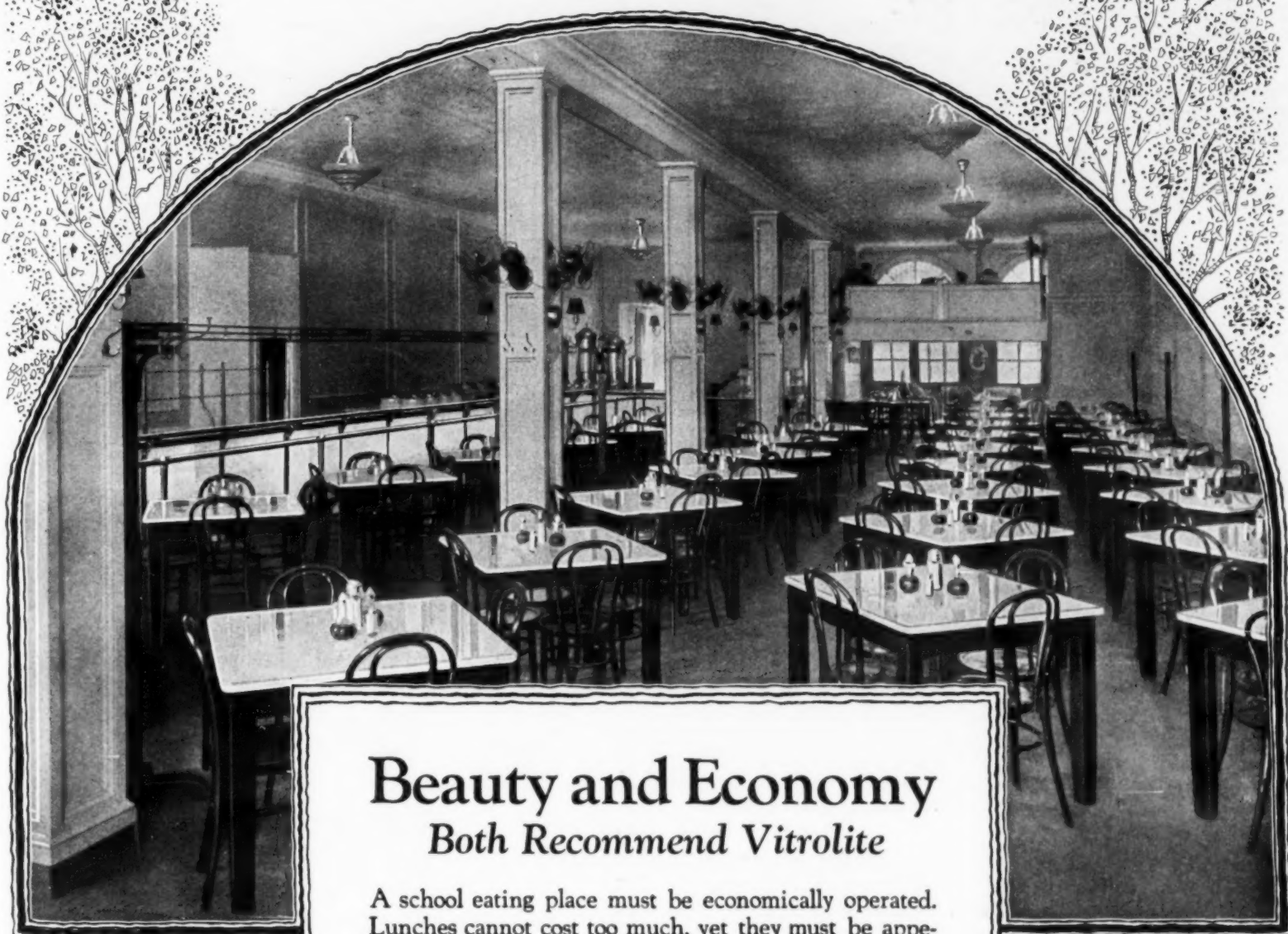
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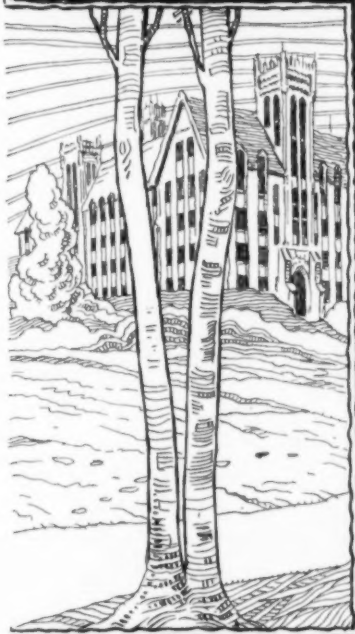
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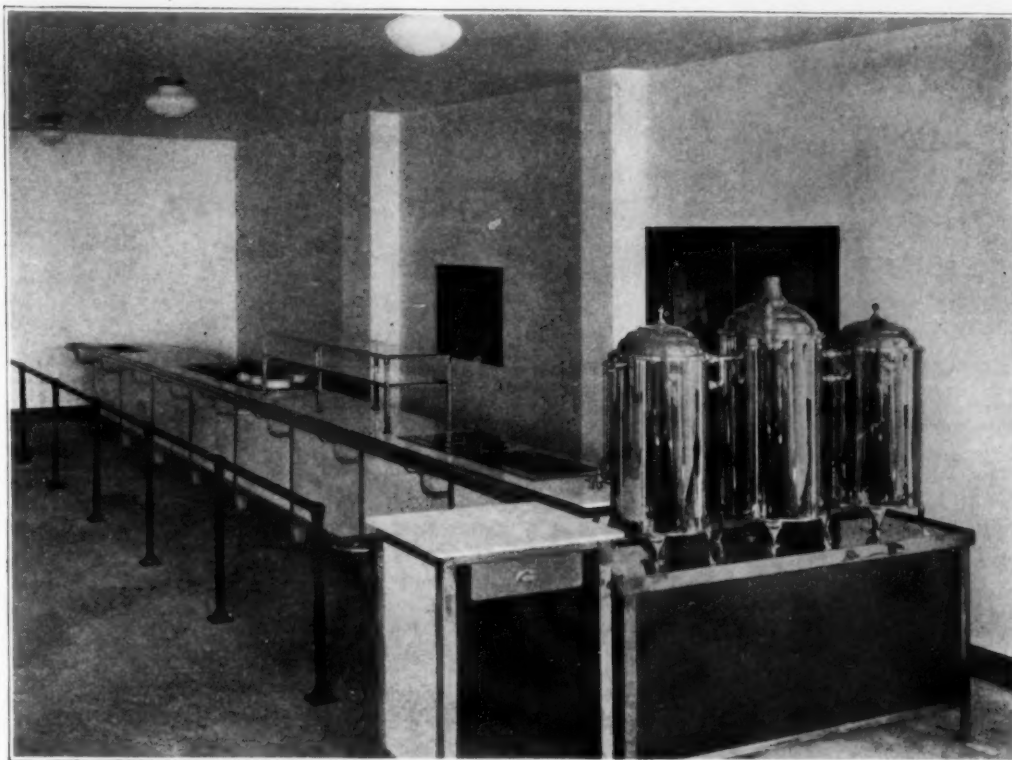
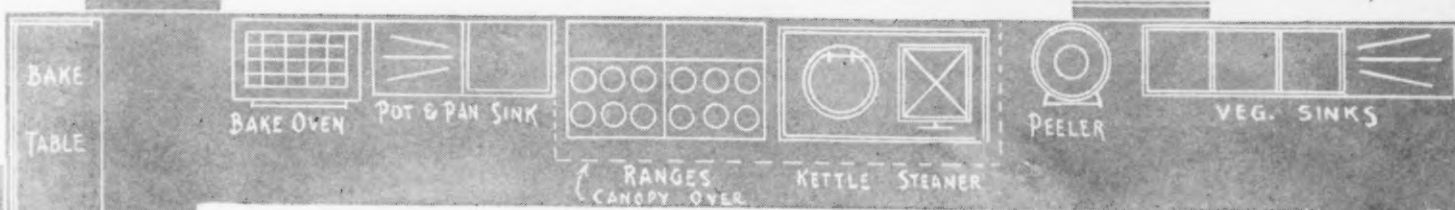
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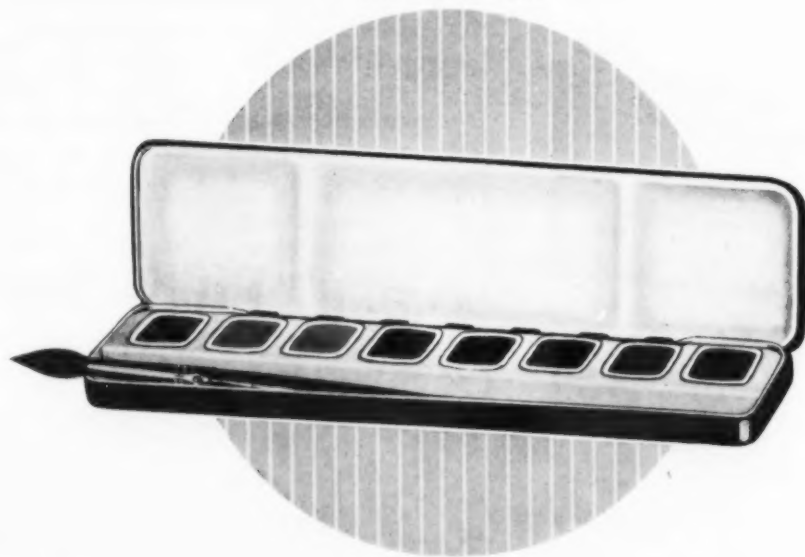
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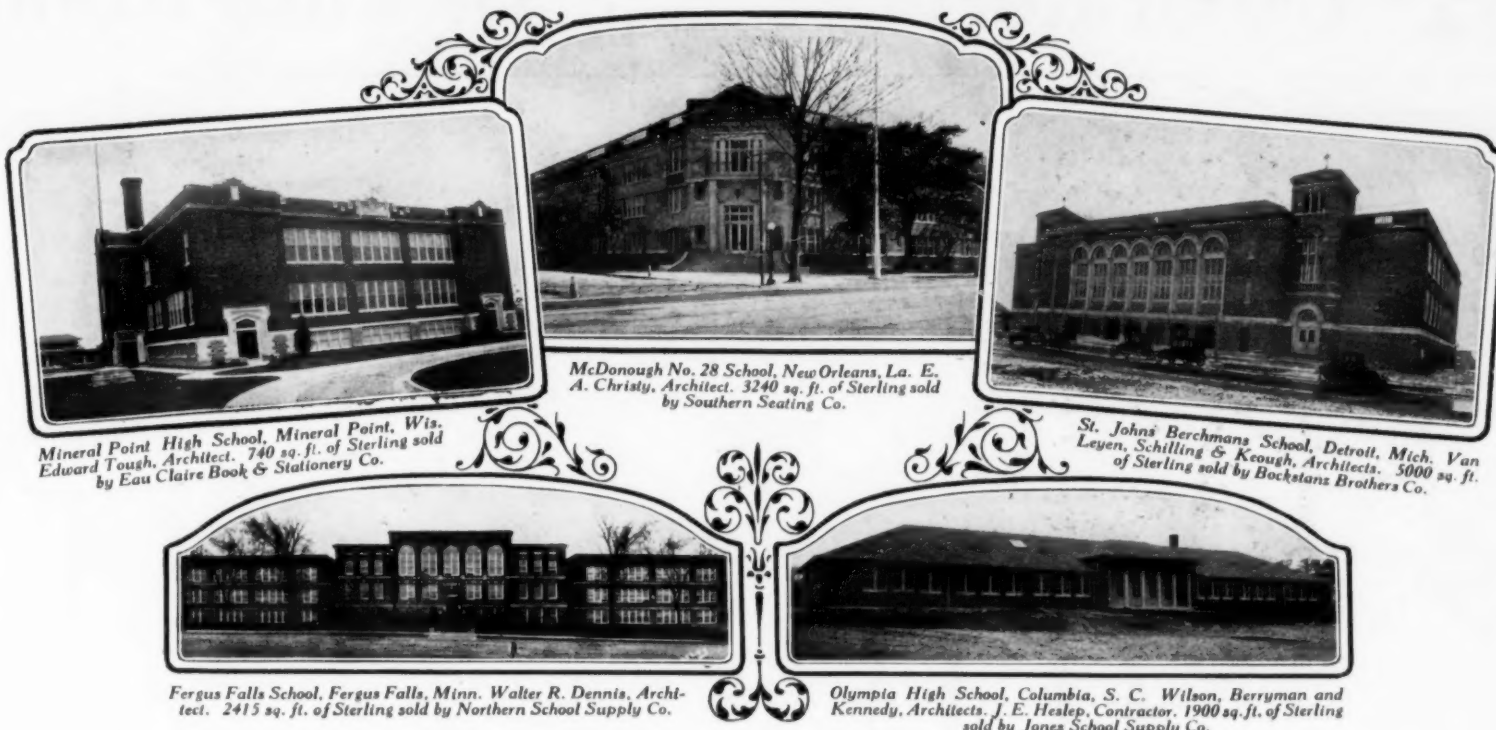


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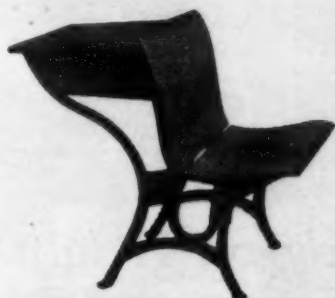
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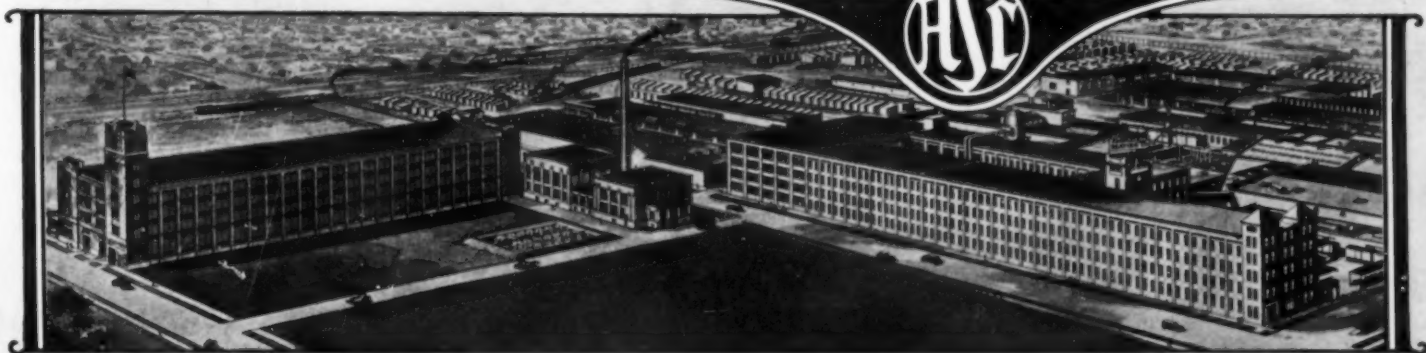
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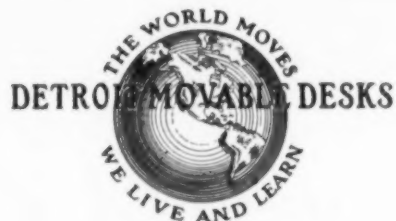
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7020W

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Write for illustrated and descriptive folder A-6 which will be gladly sent on request.

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Manufacturers of Seating for Schools.

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THE SCIENTIFIC STUDY CHAIR

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Kindergarten Chair

Made in
 seven
 heights
 from
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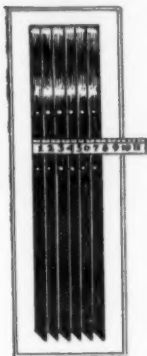
SCIENTIFIC SEATING, INC.

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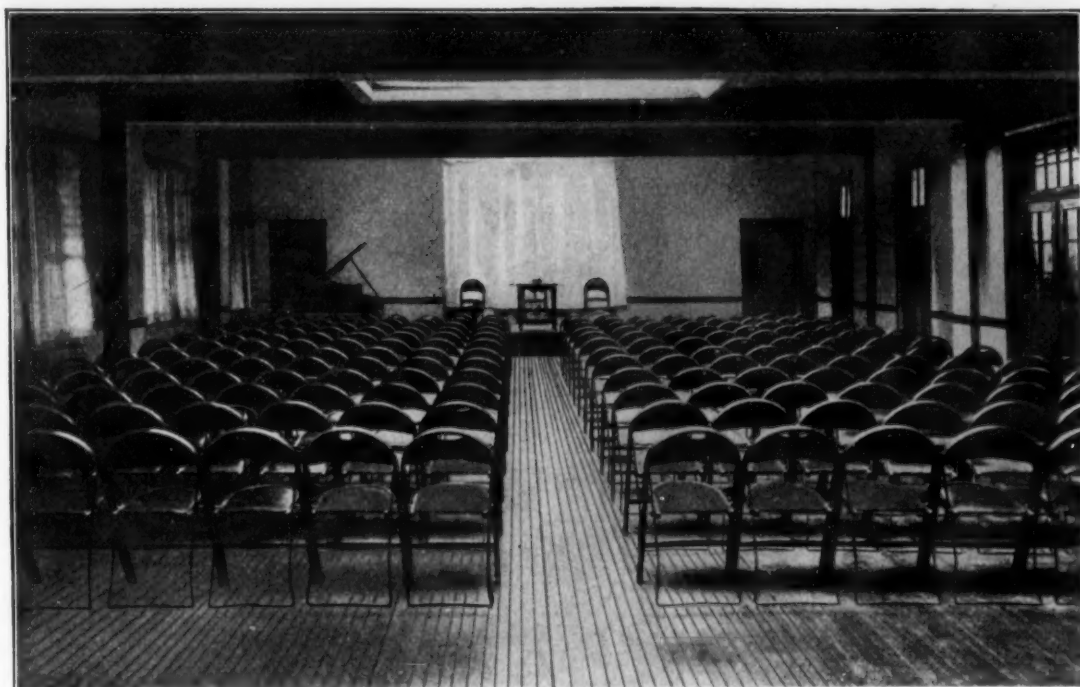
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Six chairs stack in
7½ inches of space.



Three good reasons for selecting STAKMORES



THE BENTWOOD
STRONG! Simple, rugged
construction makes
breakage negligible.



RIGID! Never before have such
strong folding tables been produced.
Special corner anchorages—exclusive
Stakmore features—make them rigid
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STAKMORES are a new type of folding chair that is rapidly being adopted by schools, clubs and for every purpose where folding chairs are used. They are the Aristocrats of Folding Chairs.

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NO MATTER how hard you treat Stakmores, they will give years of service with practically no upkeep cost. The weak points of ordinary folding chairs have been eliminated. Due to simple, rugged construction and reduction of the number of parts, breakage has been reduced to a minimum. Stakmores are the most economical folding chairs on the market.

Seat more people

THERE is no cross-bar joining rear legs of Stakmores to cut down leg

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A flip of the wrist opens the Stakmore. A touch of the hand closes it. No effort, no noise, no Chinese puzzle.

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We will gladly send you a chair to test. Compare it with any chair you have ever seen. Let it be its own salesman. Use the coupon.

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ARISTOCRATS OF FOLDING FURNITURE

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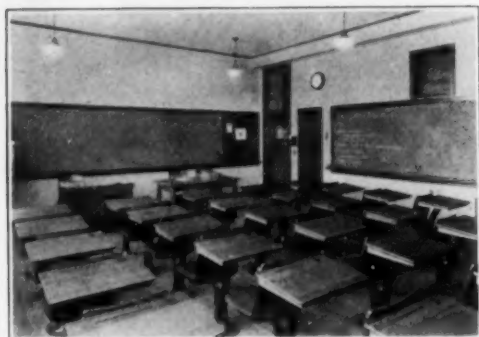
- ☐ Please send me on memorandum a Stakmore chair to test. I understand that this does not obligate me to purchase it.
- ☐ Please send me your literature and prices of Stakmore chairs and tables.

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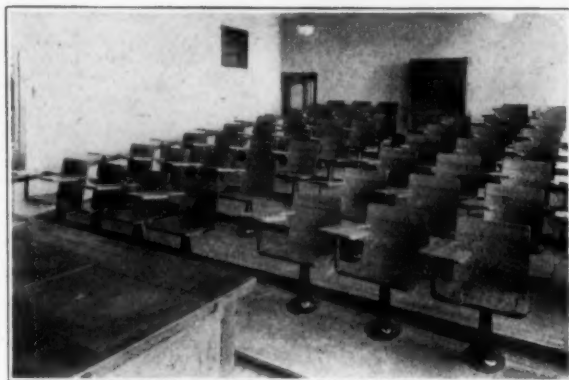
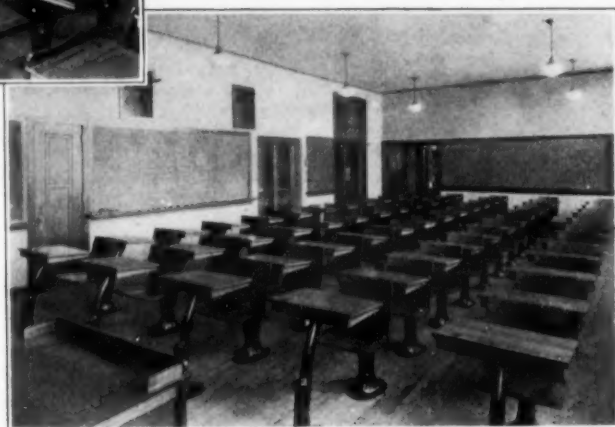
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NATIONAL SCHOOL EQUIPMENT
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We have prepared a booklet "Seating Efficiency," telling about these various features. Send for it—it is free.

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DEPT. OF SCHOOL FURNITURE
ELGIN, ILL.



The NEW "READSBORO" Two Unit Desks and Chairs

THE "MONTCLAIR"

Curved
Back
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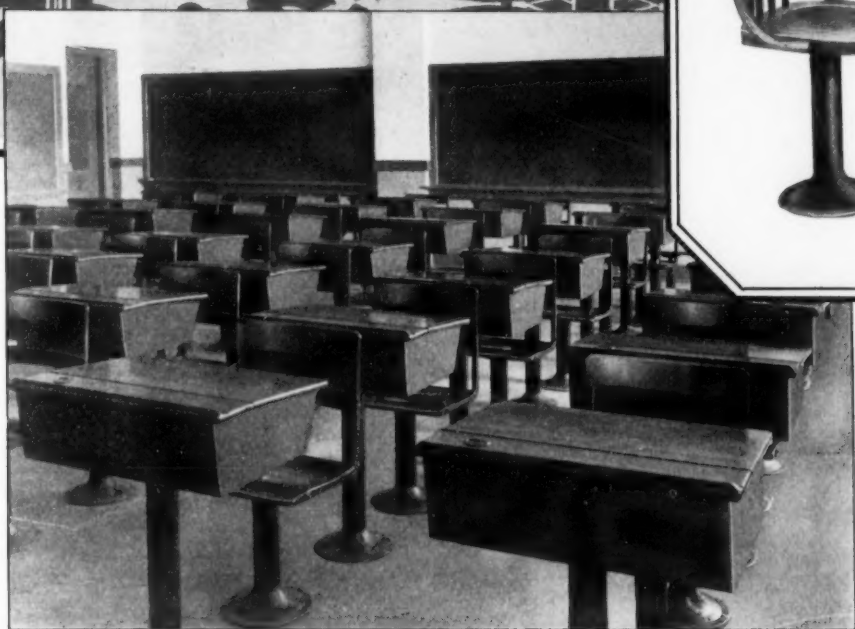
Both designs manufactured in six sizes.

READSBORO CHAIR COMPANY
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*Sanitary Pedestal Desk Set
Stationary type with G-516
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A New Departure in School Desks

THE new H-W Sanitary Pedestal Desk is worthy of the careful consideration of everyone interested in the purchase of school furniture. Its use creates a sanitary, comfortable and healthy classroom. It is furnished on either stationary or adjustable pedestal bases.

This desk is but one of the many patterns in our wide and popular line of school-seating equipment which will be on exhibition at our Philadelphia sales office, 244 South Fifth Street, during the Sixth Representative Assembly of the National Education Association—June 27 to July 2. We invite your inspection.

Heywood-Wakefield seating experts will be glad to aid you at any time, without cost or obligation, in planning your seating requirements for any room or auditorium in your school building.

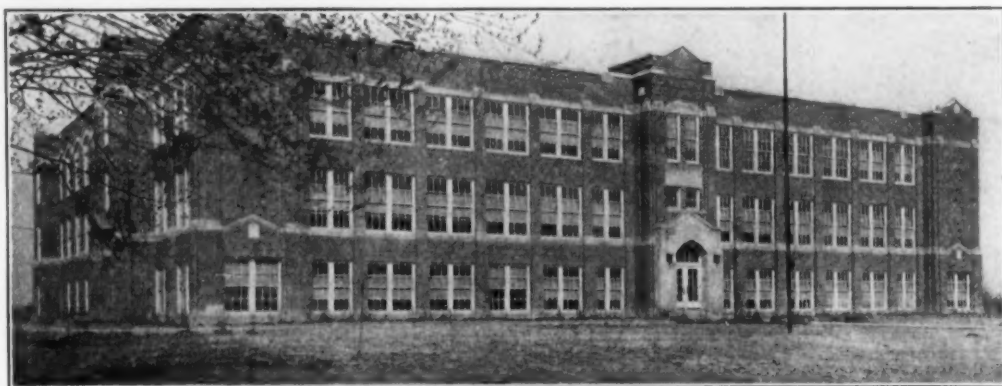


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School Cafeteria equipped with Gunn Lino Tables



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"LINO" Desks

Trademark Reg.

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are now used in
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No Breakage of Tops

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Lifttop Movable and Adjustable Chair Desk
A modern design that embraces many practical features which time and experience have proved entirely correct.

"Union" Lifttop Movable Study Chairs represent long experience in designing and producing high grade furniture for the schoolroom. All of the non-essentials have been eliminated; simplicity, durability and serviceability characterize these model pieces of school furniture.

The roomy seat and curved back form a restful combination. The plus or minus adjustment permits the writing table to be shifted to or from the pupil to accommodate his size. The lifting top provides easy means of ingress and egress without the usual distortion.

The convenient and commodious drawer is responsive and is equipped with stops which prevent falling out unexpectedly. The tops have that natural, permanent slant which experience has taught is the proper angle for both reading and writing.

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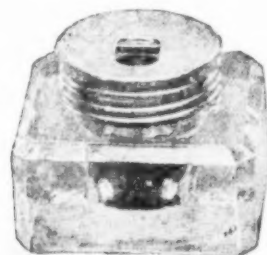
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They have exclusive features which make them unsurpassed for school use.

For instance, all tops on Jacobus inkwells are made of nickel silver. This entirely eliminates the possibility of breakage or chipping. To safeguard against corrosion by the ink, these tops are lined with glass.



No. 38 Pupil's Model



No. 39 Teacher's Inkstand

The Jacobus patented slide top prevents evaporation, and is actually dustproof. You can be sure of a clear, unmuddied supply of ink in Jacobus wells at all times. The result is—they require filling only once a term.

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When it first appeared, the Improved Steel Bessemer desk created a sensation. Its strength, its lightness, savings in shipping costs, freedom from breakage, long life, correct posture principles—these are but a few of many sound reasons for its success.

Now comes the Advanced Bessemer. To the basic excellence of the Bessemer, we have added new refinements, enhanced appear-

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Scientific balance of weights and strains provide long life and freedom from creaking. Large resources and volume production make the new Advanced Bessemer the greatest seating value ever attained. On sheer merit, it deserves your investigation.

Let us send complete details. Write today.



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Table No. 201

This is one of the many types of mechanical drawing tables we have to offer you.

Specializing in the manufacture of Art and Mechanical Drawing Room Equipment, we can give you the BEST there is—Equipment that will give you SERVICE — and SATISFACTION.

Special Economy Features

MATERIAL: All tables and cases constructed of northern oak. Oak is primarily a furniture wood — will withstand hard usage — gives the furniture a handsome appearance. Tops of tables furnished either in oak, white pine, or basswood.

FINISH: We can match your woodwork or other equipment. Why not have all your equipment uniform? All work gets three coat, dull, rubbed smooth.

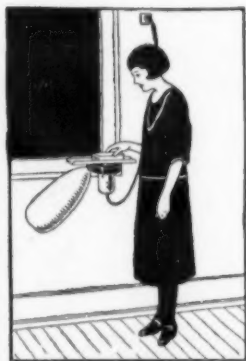
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Price \$32.50

The Little Giant is a modern hygienic device that should be in every school. Put this accepted aristocrat of blackboard eraser cleaners to work in your school under our guarantee of satisfaction.

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Silent - Swift - Dustless - Simple - Inexpensive

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Free of grit from tip to tip NATIONAL CRAYONS respond perfectly to every stroke.

Being uniform in strength, every piece of NATIONAL CRAYON will withstand a firm grip of the fingers without danger of breaking or crumbling.

The dustless feature, combined with uniformity in all other respects, makes NATIONAL the ideal crayon for the classroom.

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If you are planning new buildings or need blackboards for replacement be sure to write for further information concerning PERMAROC.

PERMAROC insures everlasting blackboard satisfaction. It is adapted to all types of buildings and possesses the finest manufactured slate surface known.



Look for this trade mark. If the blackboard you receive does not bear this trade mark on the back it is not genuine PERMAROC.

Specified by hundreds of architects. Recommended by educators everywhere. PERMAROC offers greater dollar for dollar value and costs less for upkeep than any other blackboard material.

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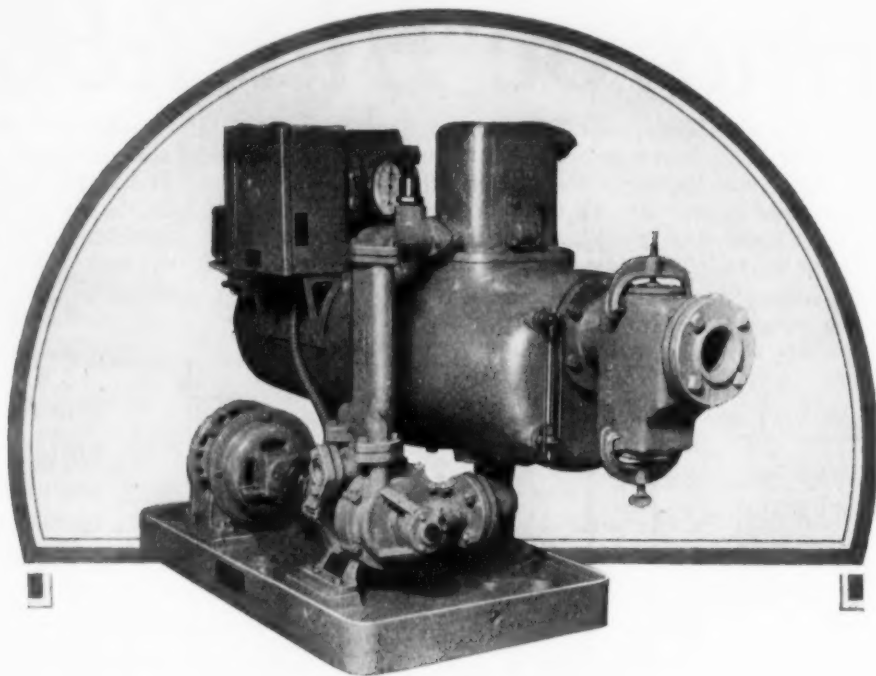
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Choose your heating pump *now!*

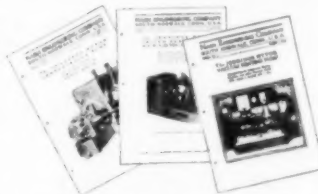
If you are thinking about installing a new return line vacuum steam heating plant next season, or overhauling your present system, now is the time to start your planning. Do not wait until next Fall. Then it may be too late to give it the careful consideration it deserves.

Remember — the vacuum pump is the heart of the vacuum system. And upon your choice of the right pump will depend, in large part, the good health, com-

fort, and convenience of your pupils during the cold months to come.

Write us and we shall gladly send you our bulletins describing Jennings Vacuum Heating Pumps, and the several uses for which they are recommended.

Or better, let your architect or consulting heating engineer tell you about the dependable trouble-free performance only Jennings Pumps can give you. Above all, do not delay — choose your heating pump now!



Write for these Bulletins. They completely describe the several Jennings Heating Pumps—their construction, method of operation, and the superior service they always give in heating service.

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BRANCH OFFICES — UNITED STATES:
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Jennings Pumps

RETURN LINE AND AIR LINE VACUUM PUMPS CONDENSATION AND CIRCULATING PUMPS

New Stairs For Old—

Install Wooster Treads
this summer and make
your stairs better than new

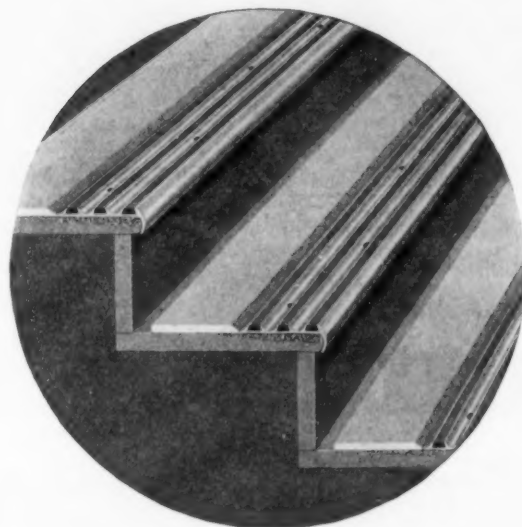
WOOSTER Safe-Groove Treads are easily installed on worn, dangerous stairways without tearing out and rebuilding. The neat, snug-fitting tread applied to the original step, makes the walking surface level, firm and safe, covers the worn portion and gives the appearance of a new stairway.

Stairs reconditioned with Wooster Safe-Groove Treads will give many years of further use at a small fraction of the cost of rebuilding.

WOOSTER Safe-Groove Treads may be installed on stairs of any material. Steps of concrete, marble, slate, tile, granite, iron or wood can be safely, economically and quickly repaired.

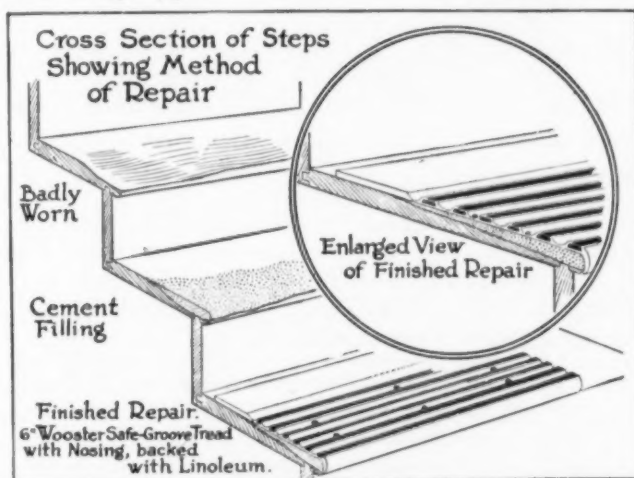
The appearance of stairs on which these treads are installed is improved, too. One of the three finishes in which these treads are made is sure to blend with the decorating scheme of any type of building.

*Write to the home office
for name of nearest representative and price of
stair treads installed.*



WOOSTER Safe-Groove Treads are ideal for school stairs because they are designed for safe footing. Broad grooves, alternating with ribs of carborundum and anti-slip, give firm footing to the heedless feet of children. The deep grooves catch and hold away from the feet, pencil stubs, matches, rubber bands or any of the dangerous things often dropped on school stairways.

THE Wooster Repair Method is a simple process. The worn and hollowed portions of a stair are first filled level with cement. The tread is then fitted tightly and snugly over the step, entirely concealing the filler and giving a new, safe walking surface on the old step. There is no cutting or fitting to be done. Wooster Safe-Groove Treads are delivered ready to install.

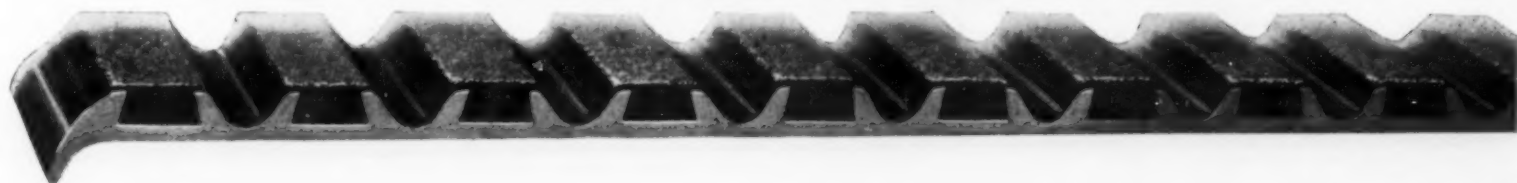


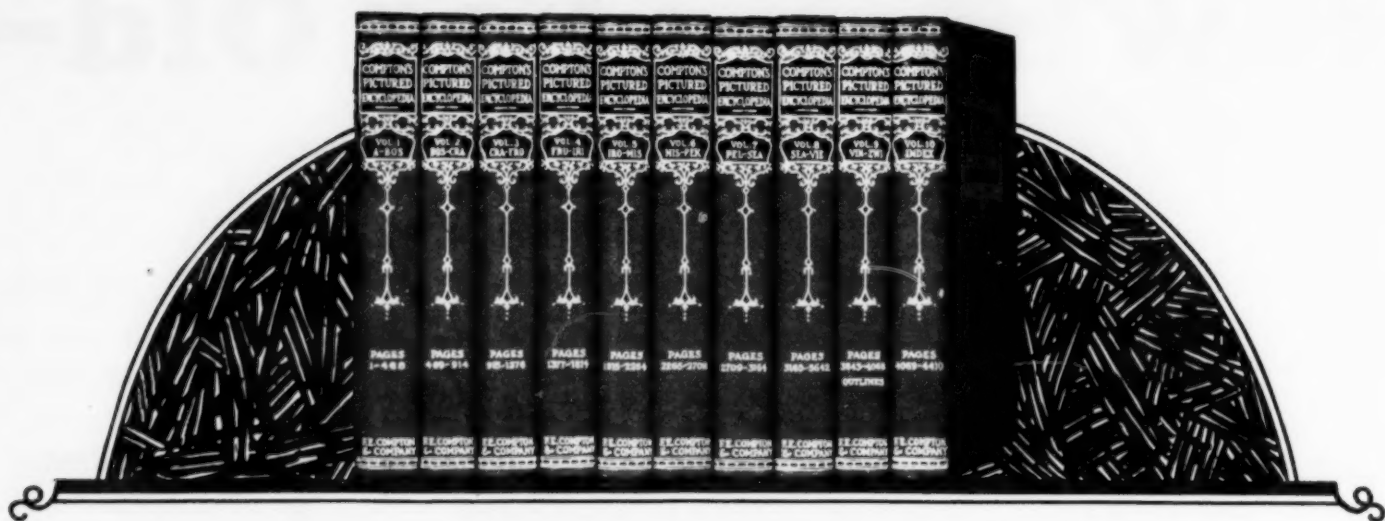
Wooster Safe-Groove Treads are manufactured only by The Safety Stair Tread Company of Wooster, Ohio. No other concern can quote prices on Wooster specification treads or furnish treads made to Wooster standards.

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**Durabilt Storage Cabinet
with Doors Closed**

An every day utility, Durabilt Steel Cabinets encourage orderliness while providing economical security and protection, under lock and key, for all supplies and materials of value used in the School, Office, Factory, Store, Bank, Lodge, Church and Home.

In design they resemble a large steel safe, having attractively smooth, flush sidewalls and doors not marred by conspicuous bolt heads. They occupy the minimum of floor area, yet offer the largest amount of storage space.

Durabilt Storage Cabinets can be furnished with any number of shelves, full length vertical partition, narrow shelves for attaching to same, vertical pigeonhole dividers, bin fronts, sliding trays for printing cuts; all of which are easily adjustable to suit individual requirements for economical storage space.



Durabilt Desk High Cabinet

This cabinet increases desk capacity. With its equipment of adjustable shelves it provides ample space for supplies, papers and other items of daily use. The Durabilt Desk High Cabinet will prove its worth in any office. By the addition of a tool tray on top the Desk High can be converted into a most useful tool cabinet for factory, machine shop and garage use. Over-all dimensions 19½" x 21" x 30¼" high.

Built for Universal Utility

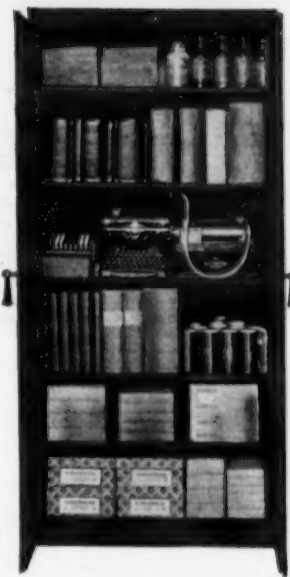
IN presenting this new line of Quality Steel Cabinets, attention is directed to our latest improvements in construction which provide utmost strength, finest appearance and greatest value.

When designing Durabilt Steel Cabinets the idea of uniformity in the construction of the various sizes has been kept in the foreground.

The doors, back, top, bottom, sides and storage shelves are each formed complete from one piece of full cold rolled patent leveled No. 20 gauge enameling steel. The door-frame is made by interlocking the top, bottom and sides. It is offset where doors overlap, assuring a close fit, giving dust proof and fire resisting features. All cabinets have closed bases.

There are three hinges on the large cabinets and two on the small sizes, each 2½" wide by 4" long, five knuckle special butt type with edges neatly beveled. The design and arrangement of hinges permit the doors to open all the way back against sides so they do not take up aisle space.

The special triple action locking mechanism which engages at three points is operated by "vault type" door handles. The vertical locking bars are concealed in a tubular reinforcement and engage in reinforced holes at top and bottom of door frame, while a heavy bolt locks doors at center. Either flat key, grooved key, pin tumbler or combination cabinet locks can be furnished with any Durabilt Cabinet.



Durabilt Stationery Cabinet

There are many places where stationery cabinets can be used to advantage. They are valuable for the storing of files, books, ledgers, office appliances, miscellaneous stationery and other articles too bulky for the average safe.

A glance around any School, Office, Lodge Hall, Hospital, or Church will reveal many different ways in which a stationery cabinet will preserve supplies and save steps.

These cabinets, equipped with a quantity of shelves, are being used extensively for the storage of books, papers and materials in school classrooms, assembly halls, and study rooms.

Durabilt Cabinets are quickly converted into spacious wardrobes. The above interior illustration suggests one of their many uses. Standard size, 36" x 21" x 78" over all.



Durabilt Teachers Cabinet

This useful combination supply and wardrobe cabinet is arranged with a full length vertical partition, narrow adjustable shelves and strong coat hanger rod.

In the classroom, laboratory and elsewhere this type is extremely valuable for the efficient storing of stationery supplies, books, drawing materials, apparatus, etc. There is plenty of room provided for the wraps and other personal belongings of one or two people in the coat compartment. It can also be used for janitors' supply cabinet and other purposes. Those contemplating the purchase of wooden wardrobes or other storage equipment should first investigate the merits of Durabilt Steel Cabinets. Many dollars can be saved by properly planning in advance.

We would like to demonstrate what Durabilt Cabinets can do on your storage requirements. Phone our nearest Sales Representative or write us direct at Aurora.



Durabilt Counter High Cabinet

This cabinet is truly a multiple purpose type. In Stores and other places it provides combination counter space and secure storage for valuable stocks. The double doors give ready access to every corner and like every Durabilt Steel Cabinet it is equipped with a secure locking mechanism operated by sturdy vault type handles. This Counter High will effect many economies for you. Write for complete information and prices. Standard size 36"x21"x42".

"No better built than Durabilt!"

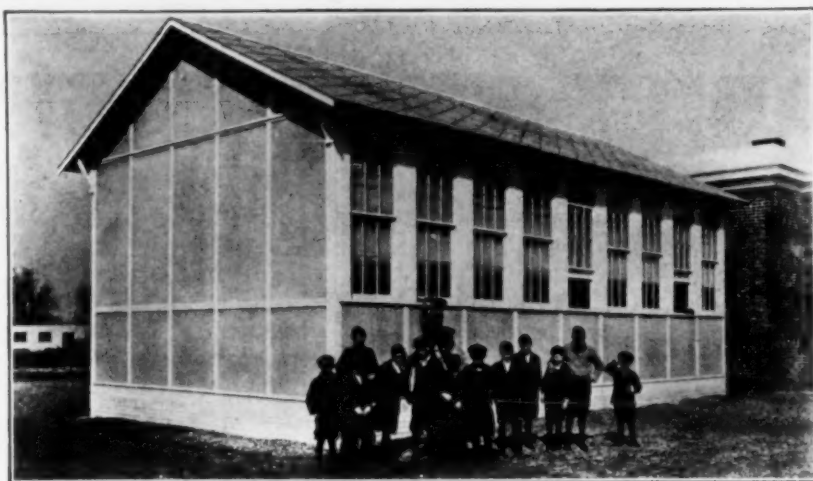
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Sales Offices in all Principal Cities.

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MIAMI, FLORIDA

March 31, 1926.

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MIAMI

Asbestos Buildings Co.,
2013 Market Street,
Philadelphia, Pa.

Gentlemen:

During the school year 1924-25, Miami and Dade County had an average public school attendance of 14,385 pupils with all of our school buildings more than loaded to capacity. Last fall our public schools opened with over 20,000 pupils and today they contain 23,249 in actual attendance. Although we had launched a large school building program in anticipation of a heavy enrollment, it was impossible to build fast enough or to complete the buildings early enough to keep ahead of this enormous increase. We then determined to temporarily solve our problem by buying portable buildings and placing them at various points over the city and adjacent territory.

After comparing different types of temporary or portable buildings, we selected the single room, fire-proof, asbestos school building as we believed it would be the most acceptable to the citizens of this city and county. They are safe from danger of fire, can be easily moved when necessary and are comfortable both in warm and in inclement weather. They are handsome in appearance and we have found them altogether satisfactory. We are constantly receiving expressions from the teachers, pupils and the patrons, and the public has commended the school officials for solving the housing problem in this manner.

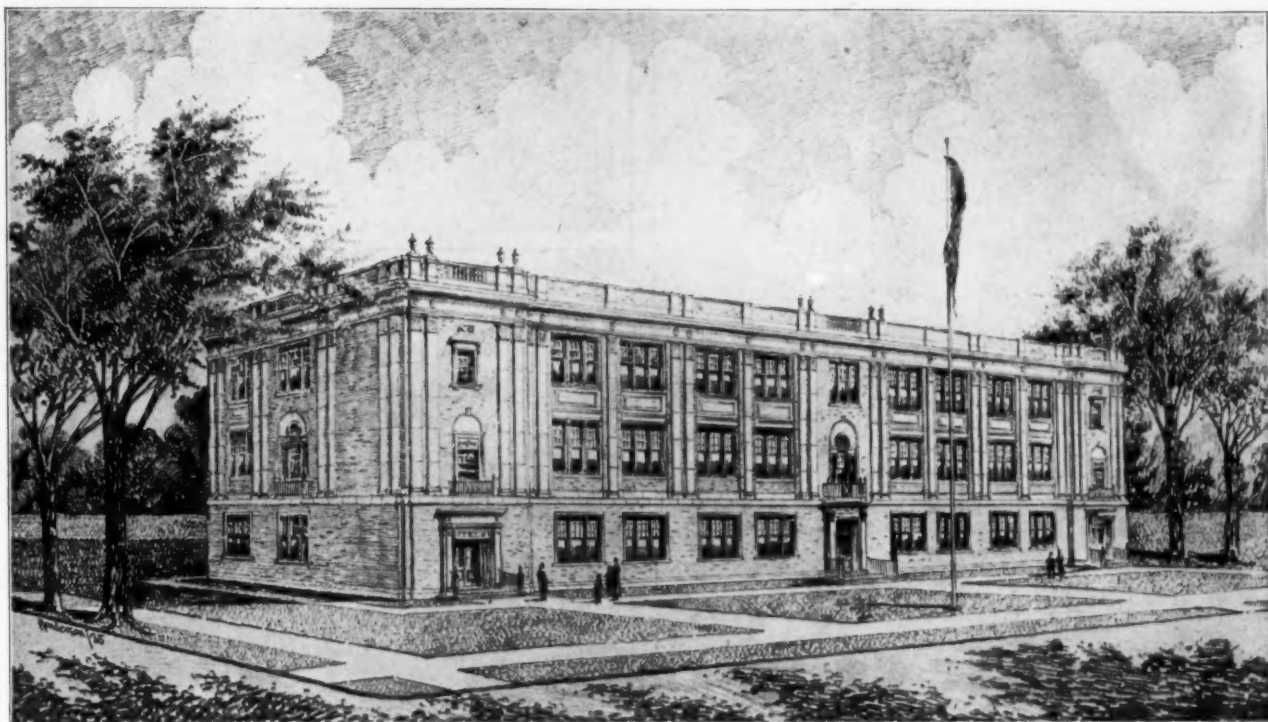
Now that all of the 150 portable buildings which we ordered from you have been erected and are being occupied, I wish to express to you our deep satisfaction with the way in which you have handled our orders. From the very beginning you have spared no time, trouble or money in your efforts to get these buildings to us despite the unusual congestion of freight into Florida during the past fall and winter. You have done everything that you have promised to do, both in your verbal and written communications.

We have never had business dealings with any company that has been more alert to our needs and has responded more to our requests than has the Asbestos Buildings Company. It has certainly been a pleasure to deal with a company so anxious to give real service.

Very truly yours,

Chas. M. Fisher
County Superintendent.

CMF/C



SEVENTEENTH STREET SCHOOL — NIAGARA FALLS, NEW YORK

Architects
WHITE & LA CHANCE
NIAGARA FALLS, N. Y.

Heating Contractors
STRONG & BYRON
NIAGARA FALLS, N. Y.

NIAGARA FALLS ALSO ADOPTED HEATOVENTS FOR ITS THREE NEW SCHOOLS NOW UNDER CONSTRUCTION

ARCHITECTS, contractors and school boards everywhere are enthusiastic about the appearance and performance of the Buckeye Heatovent.

It is finished with the same care and workmanship as any fine piece of furniture or expensive automobile. The Buckeye Heatovent, unit system of heating and ventilating, is made in any finish and will harmonize with the interior of your particular building.

Full description and detailed drawings are to be had in our data book for architects and engineers, available on request. But our complete service includes, also, that of co-operation on the part of members of our engineering staff, who will consult with you on your heating problems.

Our new catalog is ready. Write for your copy now.

Any of our Branches can supply you.

Upon request we will send you an illustrated booklet giving full information about the Buckeye Heatovent.

Buckeye Heatovent incorporate the latest and best engineering principles and are constructed of the very highest class materials and workmanship. These features, together with that intangible asset "Buckeye Service" insure your clients against poor ventilation and future repair bills.

THE BUCKEYE BLOWER CO. COLUMBUS, OHIO

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2017 Fourth Ave., North, Birmingham, Ala.
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301 Rose Building, Cleveland, Ohio.
401 Transportation Bldg., Chicago, Ill.

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250 Columbia St., Detroit, Mich.
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Brush New Life Into Old Roofs with Sterling Plastic Veneer

Roofs dry out, rather than wear out. Evaporation, not abrasion, renders them unserviceable.

You can make your roofs last as long as your buildings if you soak them periodically with highly penetrative Sterling Plastic Veneer. It soaks waterproof gums and oils deep down into the base of the roof, restoring life and strength throughout. Literally hundreds of schools use it.

For Other Building Surfaces.

Walls: Sterling Velvocate—a washable paint.
Liquid Tile—enamel.
Floors: Cement Floor Coating—A paint in colors.
Sterling Vitri-fy-x—a chemical hardener.
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Exteriors: Hi Grade Prepared Paint.
Seats and Furniture: Seat and Desk Varnish.

Don't wait until your roof is too far gone to save. Mail the coupon below.

THE STERLING PRODUCTS COMPANY

Founded 1893

Cleveland, Ohio.

Building Maintenance Paints and Specialties.

THE STERLING PRODUCTS CO.,
CLEVELAND, OHIO.

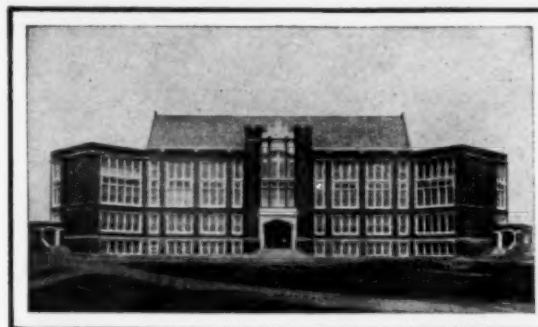
You may send me information about:

School

Signed by

City

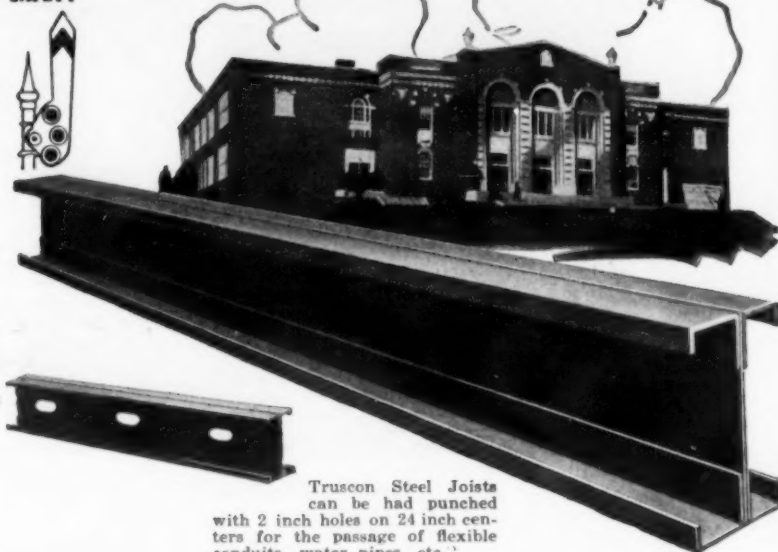
State



State Normal School,
Dickinson, N. D.

School Building,
Hopkins, Minn.
Jacobson & Jacobson,
Architects.
Lundburg & Patterson,
Contractors.

SAFETY



Truscon Steel Joists can be had punched with 2 inch holes on 24 inch centers for the passage of flexible conduits, water pipes, etc.

Truscon Steel Joists Allow Fire-Safety Without Cost Penalty

In your school you can have the safest kind of floor construction, yet pay no cost penalty, merely by specifying Truscon Steel Joists. You get fireproofness and soundproofness and a desirable structural strength and rigidity at practically the same cost as wood. Leading school architects endorse Truscon Steel Joist floor construction for school buildings.

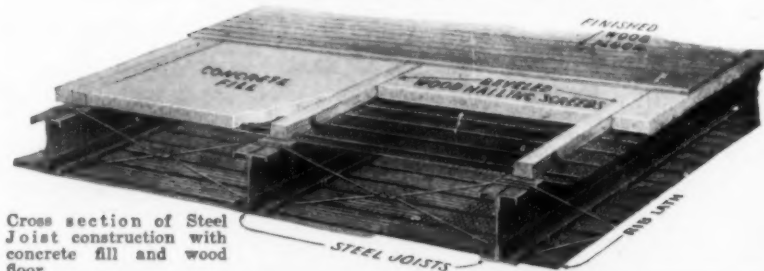
Write for illustrated catalog.

TRUSCON STEEL COMPANY
YOUNGSTOWN, OHIO.

Warehouses and Offices in All Principal Cities.
Foreign Trade Division, New York.
The Truscon Laboratories, Detroit, Mich.
Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.

***TRUSCON STEEL JOISTS**

*A complete line of Steel Buildings, Steel Windows, Metal Lath, Steel Joists, Steel Poles, Concrete Reinforcing for Buildings and Roads, Pressed Steel Specialties, Waterproofing & Technical Paints. Truscon maintains Engineering and Warehouse Organizations thruout the Country.



Cross section of Steel Joist construction with concrete fill and wood floor.

This is why

Athey Perennial

Window Shades

are being installed in leading School Buildings

Prevent Eye Strain by Shading windows properly

Eye strain, so common among school children, is very frequently caused by improperly shaded windows, the glare from such windows naturally being harmful to their immature eyes.

To eliminate all glare, lighting authorities urge that the windows be shaded with a device which can be lowered from the top, or raised from the bottom—following the course of the sun.

Athey Perennial Window Shades ideally meet this requirement; while the translucent cloth of which they are made diffuses a soft light.

Provide Automatic Ventilation

By raising the shades to the top, and lowering to about 10 inches from the window stool, and lowering the upper sash about 10 inches, an air chamber is created between the glass and the shades.

The sun's rays will superheat this air, which will then pass up and out above the sash, drawing the old air from the room and automatically providing perfect ventilation. This feature makes these shades of especial value in schools not equipped with ventilating systems.

No Rattling or Fluttering to distract Pupils

Athey Shades operate on strained wires. Consequently they cannot rattle and flutter and distract the attention of the pupils even when the wind is blowing.

Last so Long they are Most Economical

While most shades must be replaced every few years Athey Shades last indefinitely. Many of the first ones made—more than 10 years ago—are still in good condition.

There is nothing about them to get out of order: No springs, latches, catches or rollers to slip, stick and break.

And the cloth of which they are made is practically indestructible.



Detailed drawing showing construction and operation of Athey Perennial Window Shades

Athey Products

Perennial Window Shades
Cloth-Lined Metal Weatherstrips
Athey Disappearing Partition
Athey Skylight Shades

Athey Company

6031 West 65th Street - Chicago, Illinois

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Ask us for a copy of
our Pamphlet "Conser-
vation of Eyesight." It
will interest any one
interested in schools.



Who's Responsible

for Traffic Accidents
at School Playgrounds?

Parents should promote safety by consulting school officials and urging that Cyclone Fence Enclosures be provided to safeguard the children they loan to the school. Both parents and school authorities share the responsibility of making education SAFE.

Volume output reduces the cost of Cyclone Fence. Cyclone prices are lower today than ever.

Phone, wire or write nearest offices for complete information on Cyclone Fence for Schools.

CYCLONE FENCE COMPANY

Factories and Offices:

Waukegan, Ill., Cleveland, Ohio,
Newark, N. J., Fort Worth, Texas.

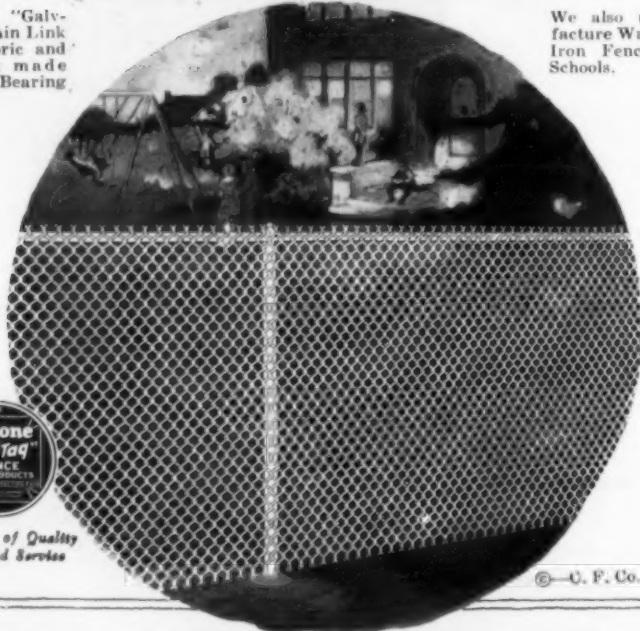
Pacific Coast Distributors:

Standard Fence Co., Oakland, Calif.
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Cyclone Fence

Cyclone "Galv-After" Chain Link Fence, fabric and framework made of Copper-Bearing Steel.

We also manufacture Wrought Iron Fence for Schools.

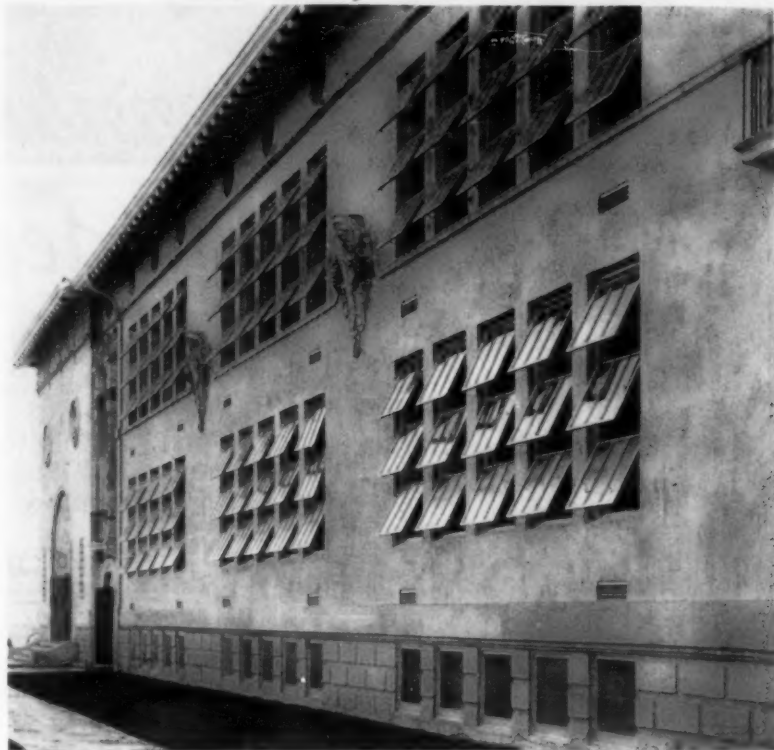


The Mark of Quality
Fence and Service

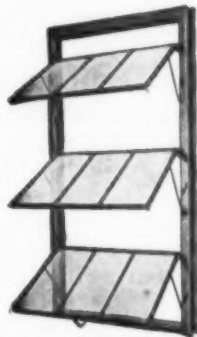
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CYCLONE COPPER-BEARING STEEL ENDURES

A Specialized Window for Modern Schools



St. Mary's Parochial School, Phoenix, Ariz. Archt.: Lescher & Mahoney. Contr.: A. F. Waselewski Co. Truscon Donovan Awning Type Windows, Architectural Projected and Circle-Head Windows, Industrial Projected Windows in Basement.



Note this ingenious modern solution of the combined shade and ventilation problems in the Truscon Donovan Awning Type Windows. All Sash operate from the lower as manual, or separately. A child can open or close all sashes at once with ease.

THE Donovan Awning Type Steel Window was developed by the Truscon Steel Company primarily for American school buildings in accord with the method of ventilation recommended by the New York Commission on Ventilation, headed by Dr. C. E. A. Winslow of Yale School of Medicine. Donovan Windows embody all the practical features of the ideal school window. They provide maximum daylight without sun glare and controlled ventilation without draughts. They have been used in important school buildings throughout the country. Built into Donovan Windows are fifteen distinctively individual features which recommend themselves to your consideration.

Interesting catalog free on request

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YOUNGSTOWN, OHIO.

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***TRUSCON**
DONOVAN
AWNING TYPE WINDOWS

*A complete line of Steel Buildings, Steel Windows, Metal Lath, Steel Joists, Steel Poles, Concrete Reinforcing for Buildings and Roads, Pressed Steel Specialties, Waterproofing & Technical Paints. Truscon maintains Engineering and Warehouse Organizations thruout the Country.

Do You Expect to Paint Any of These Surfaces?



THESE SURFACES NEED EXTRA PROTECTION

Here is a list of the principal surfaces in schools that need the protection of special paints and enamels. If you will check the ones that you expect to paint, cut out and send to us with your name and address written on the margin, we will tell you the best way to protect and decorate them.

- | | |
|---|--|
| <input type="checkbox"/> Domestic Science Class Rooms | <input type="checkbox"/> Kitchens |
| <input type="checkbox"/> Shower Baths | <input type="checkbox"/> Cafeterias |
| <input type="checkbox"/> Swimming Pools | <input type="checkbox"/> Boiler Settings |
| <input type="checkbox"/> Wash Rooms | <input type="checkbox"/> Boiler Fronts |
| <input type="checkbox"/> Roofs | <input type="checkbox"/> Laboratories |
| | <input type="checkbox"/> Steam Pipes |

ORDINARY paints and enamels will not withstand severe and unusual exposure. They soon give up the fight and leave their dependent surfaces unguarded.

On the surfaces listed here, these timid coatings will not give satisfactory protection. Such surfaces require paints and enamels that have the extra backbone that is needed in times of trial and stress. For years we have specialized in the manufacture of just such products and we will be glad to give you the benefit of our experience.

Paints and Enamels are like men—you never can tell to look at them what they will do when they come in contact with unusual conditions. In the package our Special Coatings look like other paints and enamels, but on the surface their powers of resistance are fully demonstrated. Many paints and enamels look fine and give protection for a short time, but weaken and grow tired. Their resistance is lowered and soon they fail to properly protect the surface. Not so with Tropical Special Paints and Enamels. They keep alive, active and elastic.

Their added energy is what pays dividends to the user because it defers the necessity of repainting. Almost unbelievable stories of Tropical super-service are common.

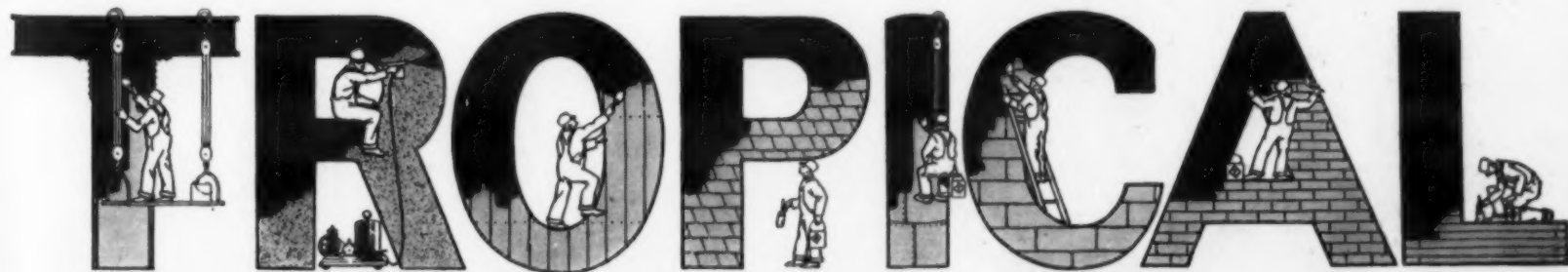
In domestic science class rooms, for instance, walls and ceilings are subjected to cooking fumes, steam and frequent cleaning, while grease, hot water and other things are frequently spilled on the floor. Most paints and enamels will not stand up against this exposure, but we know that our Toconamel and Floorkote will give long wear because they have been tested and tried by years of service under just such conditions.

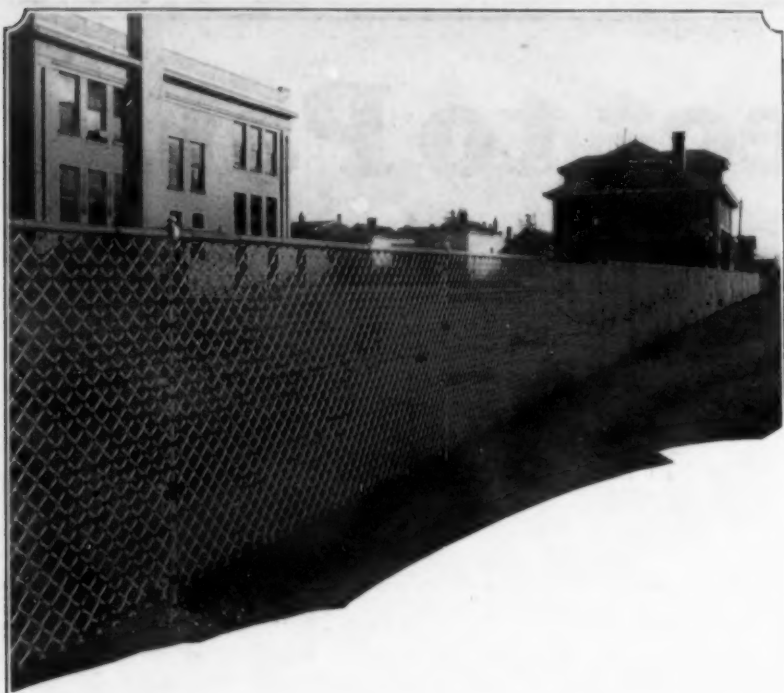
If you are going to paint any of the surfaces named in the list above, why not get our recommendations? Naturally you want to get the best protection that you can buy because it pays in the end. Check the list, write your name on the margin and return to us. Our experience is at your disposal.

We sell direct to Universities, Colleges, Public and Private Schools.

The Tropical Paint & Oil Co., 1228-1270 W. 70th St., Cleveland, Ohio

Warehouses in Principal Business Centers





Vacation time is fence time

PAGE FENCE erected during the summer months will relieve you from care and worry when the next school term opens. It stands as a friendly but impassable barrier between carefree little citizens and the dangers of the street. It keeps children under the constant control of teachers and prevents straggling at recess.

Throughout vacation time or at night Page keeps the mischief maker and the vandal at a distance. It is the most economical form of protection you can purchase.

Page Wire-Link Fence is built of material that will serve you economically and well for many years. Because of an extra heavy and uniform coat of galvanizing over copper-bearing Steel or ARMCO Ingot Iron (the latter exclusive with Page) it will resist rust and corrosion.

No matter where you are there is a Page distributor near you who will serve you promptly. Write for interesting literature on property protection. Address the distributor in your city or



PAGE FENCE & WIRE PRODUCTS ASSOCIATION

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Distributing wire link products made by the
Page Steel & Wire Company, Bridgeport, Connecticut
An Associate Company of the American Chain Company, Inc.,
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PAGE FENCE

A SHADE IS ONLY AS GOOD AS ITS ROLLER



You can reason with a bad pupil but not with a bad window shade

AS MUCH of a teacher's energy can be used up on a bad-acting window shade as on a bad-acting pupil.

Why experiment with shades? To make sure of perfect service simply specify that all shades be of Hartshorn manufacture. Be particularly sure that every shade is mounted on a genuine Hartshorn roller.

You may be told that other rollers are just as good as the Hartshorn. But remember this: Stewart Hartshorn in 1864 invented the window shade as it is known today. Hartshorn Rollers contain his mechanism. For 60 years it has proved its superiority.

Maps and charts are expensive — mount them on Hartshorn rollers.

For window shades that will meet your needs exactly, specify Hartshorn's Oswego Tinted Cambric Shade Cloth mounted on Hartshorn Rollers with No. 86 or No. 87 double brackets.

WRITE FOR NAME of dealer through whom you may secure Hartshorn shade products and for samples of colors: Sage, Linen, Putty, Dust, Dill, in Tinted Cambric especially adapted for school use.



STEWART HARTSHORN CO., 250 FIFTH AVE., NEW YORK CITY

Let the Chef Tell You!



The kitchen of St. John's Hospital, Long Island City, is Vulcan equipped.

Modern Gas Ranges Cook Better Food – Quicker, More Economically!

EVEN chefs who have learned their art on coal stoves now admit that gas is the superior cooking fuel, when used in modern appliances.

Thousands of chefs, formerly antagonistic to the scorching and uncontrollable temperatures of antiquated, obsolete gas ranges, now recognize the greater speed, flexibility and cooking advantages of gas fuel as applied in the new-day Vulcan Hot-Top Gas Range.

The Vulcan Super Burner and its revolutionary application in this heavy-duty gas range saves thousands of dollars annually for leading hotels, restaurants and institutions.

We have the facts—unbiased and unadulterated. Write today to the Standard Gas Equipment Corp., 18 E. 41st St., New York City. [Pacific Coast Distributor—Northwest Gas and Electric Equipment Co., Portland, San Francisco, Los Angeles.]

VULCAN

GAS **HOT TOP** RANGES



12,600 SCHOOLS FOUND THE SOLUTIONS TO THEIR EQUIPMENT PROBLEMS IN SHELDON CATALOGS



FURNITURE

FOR
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300 SHELDON DESIGNS

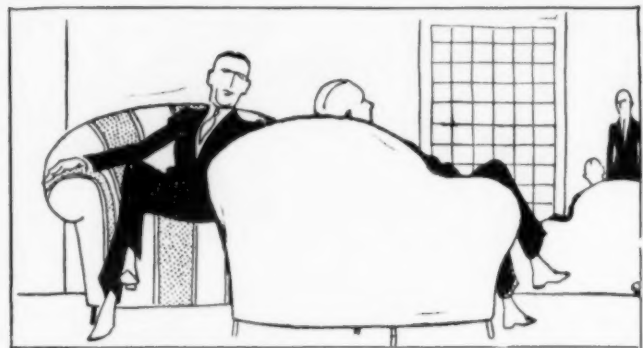
If you are building a new school, an addition, making alterations to present buildings, re-equipping rooms or adding to present equipments don't buy until you have had an opportunity to examine the Sheldon Catalog No. 21 and the Multi-Service Furniture Supplement. In these two books you will find furniture which has been developed for every need—over 300 standard designs—the result of twenty-seven years' manufacturing experience. Sheldon furniture enables communities to secure the utmost financial and educational returns on their investments. For instance, by the use of Multi-Service furniture a class room may be economically re-equipped for teaching several science or vocational subjects without interfering with its use as a recitation room! It will pay you to examine the Sheldon catalogs before you buy!

*You, Too, May Find the Solution to
Your Equipment Problems in the Sheldon
Catalog. Send for a Copy Today!*

E. H. SHELDON & COMPANY

Manufacturers

MUSKEGON, - - - MICHIGAN



"That's No Problem, Jim!"

Not when you get each item of modern equipment for the preparation and serving of food from W. F. DOUGHERTY & SONS, Inc., 1009 ARCH STREET, PHILADELPHIA. They've been Manufacturers and Kitcheneers since 1852, and in those seventy-four years they've done fine jobs from coast to coast. Dougherty's Engineering Department will give you splendid co-operation in working out details—and at no additional cost!

"Better drop DOUGHERTY a line today!"

RELIABLE!

PRACTICAL!

ECONOMICAL!

EFFICIENT!



2¢

*Brings you
\$100.00
worth of
information*

The proper planning of Kitchen and Lunch Room Equipment requires years of experience.

Our Catalog is invaluable in aiding you to select the better kinds of equipment.

Our Engineering Department

is at your service, entirely without obligation, in helping you plan efficiently on your particular needs.

This service will enable you to specify intelligently and buy economically. Consult us.

*A two cent stamp is your only investment
in obtaining this valuable information.*

THE CLEVELAND RANGE COMPANY

519 Huron Road

Cleveland, Ohio

*"Everything for the Dining Room
and Kitchen"*



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Bloomington, Illinois

Architect:
A. L. Pillsbury
Plumber:
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Number 1

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State Normal School
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Architect:
Gullbert & Betelle
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A. A. Wells



Wentworth School
Chicago, Ill.

Architect:
John A. Christiansen
Plumber:
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School Plumbing and the Future Generation



THOSE who design schools of the modern type realize that perfect sanitation is absolutely necessary. The health, and even lives, of our future generation depend greatly upon the thoroughness with which sanitation is preserved and maintained.

It is with this idea in mind that so many architects and school boards specify "*Clow for all plumbing.*"

Every piece of Clow equipment is put through a "set-up" test before shipment. The fixtures are assembled and set up according to specifications, just as they'll be when installed.

As a result, perfect fit, operation, and appearance are assured. Installations are made without the extra cost of unnecessary fitting, repairing or replacing.

In addition, the exceptional storing and shipping facilities of the world's largest plant devoted to the distribution of plumbing, heating and steam supplies, provide the prompt shipment that building schedules demand.

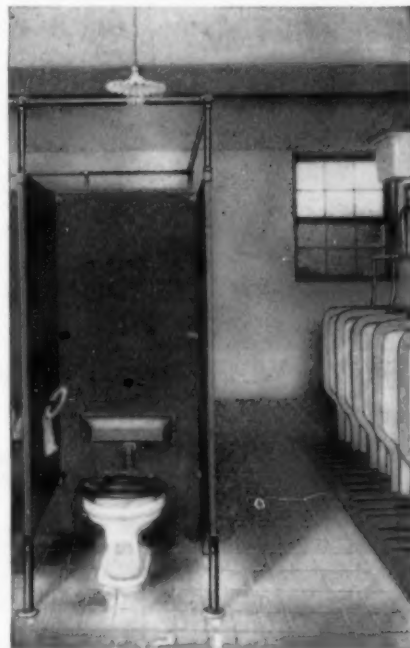
When all these things are considered it is only natural that so many modern schools of the type pictured on this page, should use Clow Plumbing throughout.

JAMES B. CLOW & SONS

201-299 North Talman Avenue

CHICAGO

Sales offices in principal cities



CLOW

PREFERRED FOR EXACTING PLUMBING SINCE 1878

The Ideal Installation for Schools

Watrous

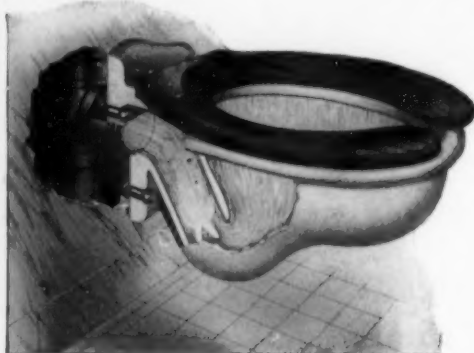
Flush Valves and Duojet Closets

**More Sanitary—More Economical
Clogging and Overflowing Avoided**

In the Watrous Duojet Closet there are special safeguards against the danger of a choked outlet. Also, the bowl is very economical with water. It eliminates the narrow outlet which is needed beyond the trap in most single-jet bowls to maintain syphonic action, but which often occasions clogging, overflowing, and heavy repair bills. Two powerful converging jets effect a thorough flush, at a far lower water-consumption than is required by the majority of single-jet types.

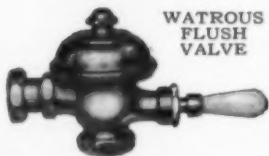


WATROUS DUOJET FLOOR CLOSET



WATROUS DUOJET WALL CLOSET

The wall type of bowl, as it does not rest on the floor, greatly simplifies the work of cleansing the toilet room, and by dispensing with furred ceilings and closet connections in floors it promotes economy and speed in the erection of new buildings.



WATROUS
FLUSH
VALVE

The Watrous Flush Valve delivers the exact quantity of water required for a thorough flush by the bowl with which it is used. Therefore, when installed with the water-saving Duojet bowl, it makes possible substantial annual economies that may be added to the saving afforded by the non-clogging feature. The valve has a self-cleansing device which automatically prevents obstruction.

The Watrous line includes several models in which the flushing is effected by automatic seat-action. Among these is the "Juvenile" type, with a bowl of less than normal height, suitable for small children.

Write for full details on the Watrous Flush Valve and Duojet Closets

PLUMBING DIVISION

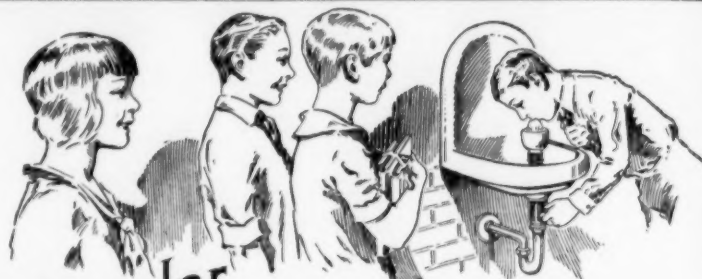
Watrous Flush Valves, Duojet Closets, Self-Closing Basin Cocks, Combination Lavatory Fixtures, Pop-Up Wastes, Drinking Fountains, Liquid Soap Fixtures, etc.

THE IMPERIAL BRASS MFG. CO.

521 South Racine Avenue, CHICAGO

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A Popular *Century* Drinking Fountain For Schools

Children like to drink from a Century Fountain. The water emerges from the Bubbler Head in a steady even stream, without squirting or splashing. The interior concealed, Century patented regulator is simple to adjust and saves water.

The sanitary white porcelain bowl on the wall fountain pictured here (No. A-63) prevents the lips from touching the bubbler head. This fountain is used extensively in schools, it possesses the three prime requisites for school installation, rugged construction, pleasing appearance and economical operation.



No. A-63

Another Popular Century Fountain, of the wall bracket type, for schools.

The fittings are highly nickel-plated brass, the sink is heavy porcelain enameled.

Write for our new complete catalogue and prices.

Century Brass Works, Inc.

308 N. Illinois St.

Belleville, Ill.



Evernu is the perfect seat. The interior wall of special hard rubber of great strength and the outside surface of solid color hard rubber are vulcanized under hydraulic pressure into one lasting piece. No finish to wear off. No joints to open up. The hollow center provides lightness with strength. The hinge is as durable as the seat.

These schools will never need toilet seat repairs or replacements. They are equipped with Evernu Seats. If you want to install seats that will outlast the building and always look new have your architect specify "Evernu." They cost no more than ordinary seats. Write for catalog showing models for every type of bowl.

PUBLIC SCHOOLS OF:

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Indianapolis, Ind.	Ohio State University,	Columbus, Ohio.
Evansville, Ind.	San Jose High School,	San Jose, Cal.
Harrisburg, Pa.	Selingrove University,	Columbus, Ohio.
Kansas City, Mo.	Frances E. Willard High School,	Long Beach, Cal.
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Evansville, Indiana

Founded 1905

The Largest Manufacturers of Toilet Seats in the World.

HAAS FLUSH VALVES have this Difference—they are always a direct saving and never an “Endless Expense”



HAAS Flush Valves

These valves have no complicated mechanisms, no needle-point adjustments, no small ports to clog, no metal-to-metal contacts. They can be instantly adjusted to all water pressures, positively controlling flush and afterfill without waste. Can be attached to all standard types of siphon jet or wash-down bowls.

**WATER
CLOSETS**

Haas
**FLUSH
VALVES**

Haas water closets are especially built for school and public building installation. Many types for every need.

You can no more judge a flush valve from its outward appearance than you could determine the efficiency of an automobile motor by glancing at it. In either mechanism, actual performance under all conditions is the thing that influences your opinion.

Haas Flush Valves are not only compact, finely finished and attractive—they are designed with true engineering skill and built with a high safety margin of brute strength to withstand possible abuse. Thus they show you these two important savings:

—*elimination of water wastage.*

—*minimum repair expense.*

All Haas Flush Valves are unconditionally guaranteed for five years with seldom a claim being made within the guarantee period. Many of our flush valves have been in continuous use for over a score of years without necessity for repair.

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Catalogue sent upon request to school board officials and architects.

PHILIP HAAS COMPANY

DAYTON, OHIO

Established 1896



Protect them at the *danger line*

Prevent automobile accidents at your schools or playgrounds. Keep the children from heedlessly darting onto the dangerous roadway.

Converting the *danger line* into a *fence line* insures safety. It helps teachers enforce discipline and control the children—uninterrupted, they can devote more time to supervision and instruction.

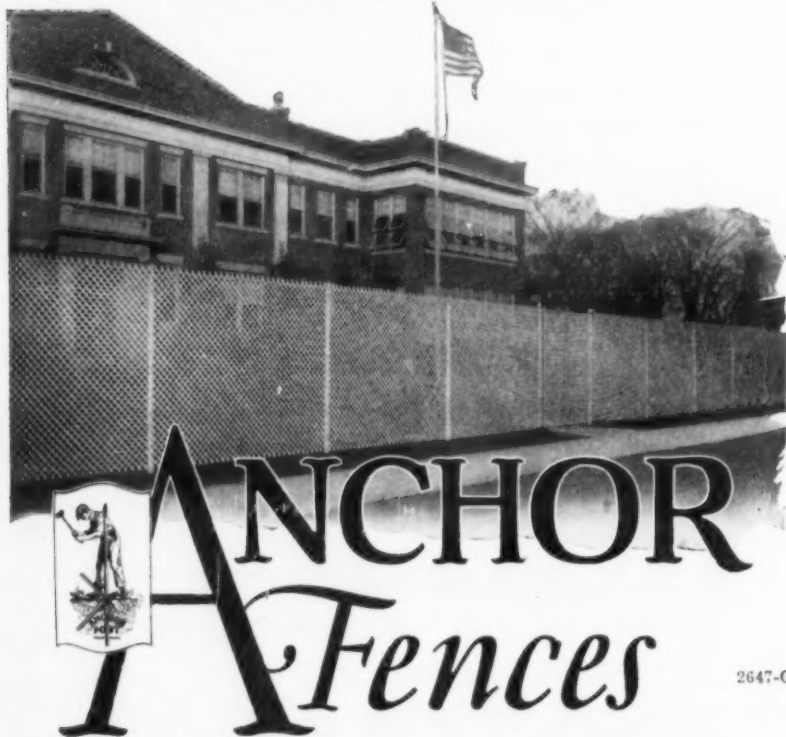
An Anchor Fence affords effective and lasting *danger line* protection. Its strong chain link fabric of Copper-bearing Steel Wire, Galvanized After Weaving, firm Drive-Anchorage and thorough Galvanizing Throughout insure years of service and make it an economical investment.

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Standard Equipment
GYMNASIUM-PLAYGROUND-STEEL LOCKERS

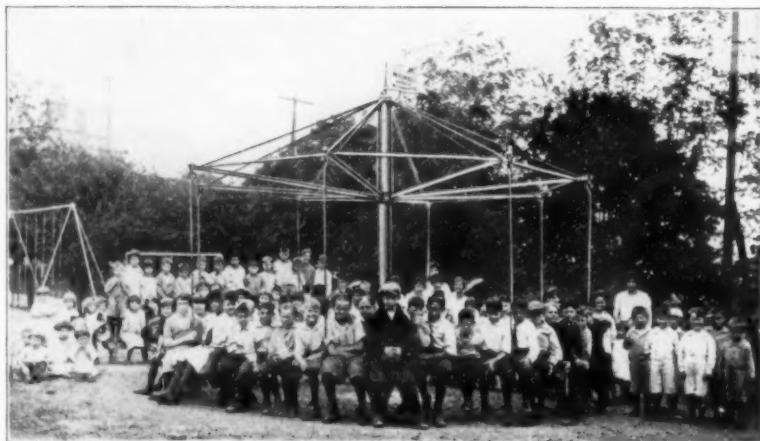
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Now is the time to check up your Gymnasium Equipment before vacation days. Clean all the parts and oil steel pieces to prevent rust. Send us your list of repair parts and new Gymnasium Apparatus to be delivered in the summer.

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Every School Playground Needs a MERRY-WHIRL!

Some of the Special features of this device are:

50 or 1 can be accommodated at the same time.
Children can board or leave it at will while in motion.
Costs less per child than any other equipment.
Built to give years of service with a minimum of upkeep.
Children enjoy the Merry Whirl in the winter as well as the summer.
Neat in appearance and improves the Playground site.
It requires no supervision.

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An Aid to Teachers—An Incentive to Students

THOUSANDS of typewriting teachers are today finding their work easier and more interesting because of Underwood Medal Emblem Awards. And the incentive of winning these beautiful awards is urging students to try for a higher degree of typewriting speed and accuracy.

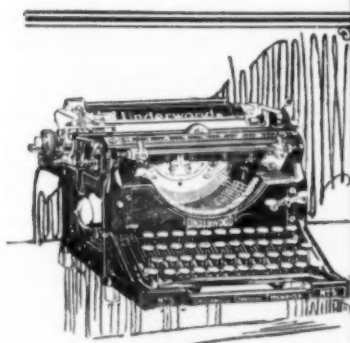
There are seven medal emblems—ranging from the bronze with the center of rich blue enamel to the platinum-gold, inset with diamonds and emeralds. For each student award there is a corresponding one for teachers.

The awarding of these emblems is but one phase of Underwood School Service. Monthly Tests, Charts, Honor Rolls, Rental and Employment Services and Speed Demonstrations are other ways in which Underwood is helping promote Better Typewriting.

We have prepared a booklet describing the Underwood Awards Plan and showing the Medal Emblems in full colors. Your request for this free booklet on the coupon below will not obligate you in any way.

School Department—

UNDERWOOD TYPEWRITER COMPANY, Inc.
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Dept. "A"
6-26

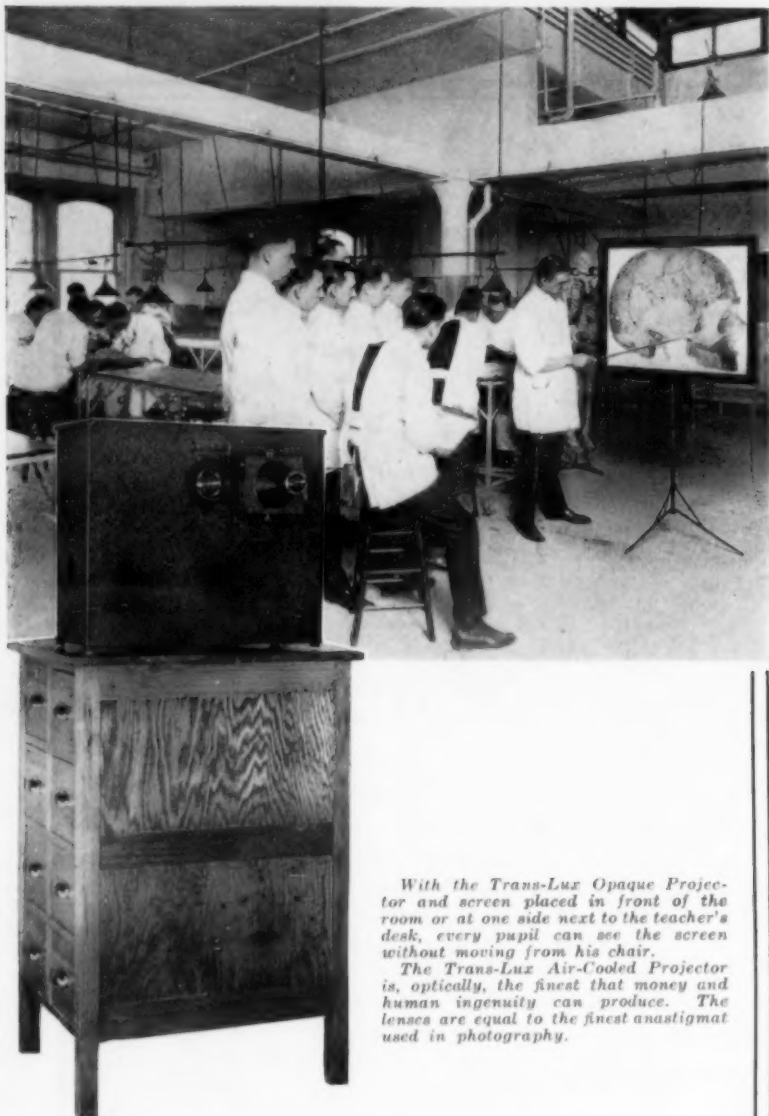
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School _____

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With the Trans-Lux Opaque Projector and screen placed in front of the room or at one side next to the teacher's desk, every pupil can see the screen without moving from his chair. The Trans-Lux Air-Cooled Projector is, optically, the finest that money and human ingenuity can produce. The lenses are equal to the finest anastigmat used in photography.

At last a thoroughly efficient modern mechanical aid in visual instruction!

Trans-Lux Air-Cooled Opaque Projector in combination with Trans-Lux Daylight Screen, is the one perfect method for harnessing pictures as a classroom aid.

With the opaque projector, any type of material may be used—clippings from magazines and newspapers, photographs, ordinary hand-written cards, diagrams and charts. A stereopticon attachment makes possible use of regular prepared glass slides. Above illustration shows dramatically the possibilities of the equipment. An instructor is explaining an intricate diagram to one section of the class without in any way interrupting the rest of the class at work on other studies.

No darkroom—no disorder and no complicated machine to operate. A simple, efficient **air-cooled** projector which answers every classroom need.

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THE TRANS-LUX DAYLIGHT PICTURE SCREEN CORP.

247 PARK AVENUE

NEW YORK CITY



A practise filing outfit for your school

THIS "Y and E" practise filing outfit is life-size—permitting the use of full size guides, folders and correspondence—yet it is compact, and complete in the one unit shown above. The cover serves as a card file.

Different types of guides are used to demonstrate

geographic, alphabetic, numeric and subject systems. With the outfit we provide 100 pieces of actual assorted correspondence.

The cabinet is of oak, beautifully finished, and the guides and folders are of durable quality to stand repeated handling. Write us for complete descriptive folder.

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Prismex Water Colors



The Prang Company is gratified to announce that it can once more supply Water Colors that it can recommend and guarantee. In the Prismex Water Colors we are now able to offer the same high quality upon which The Prang Company made its reputation so many years ago.

To protect the Art teachers who wish to be sure of obtaining the highest quality of Water Colors, we have named these new water colors the Prismex Water Colors.

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These Prismex Hard Cakes are standard size and fit all makes of boxes. They come in four colors—and each bears the trademark Prismex.

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The Prismex semi-moist colors come in the standard half pans, three-quarter pans and whole pans. All of these are interchangeable with all standard boxes and can be used as refills. Available in sixteen colors.

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Prismex

A New Name for Old
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118 East 25th Street
NEW YORK

Have You a Little Paper in Your School?

The School News

A facsimile of the front page of a schoolpaper, such as may be published for the purpose of convincing parents of your children of the value of printing in connection with academic and vocational instruction in public schools.

VOL. 2

ANY COMMUNITY, ANY STATE

No. 1

The Value of Schoolpapers

WHAT the newspaper is to the general community the schoolpaper is to the school community. Both publications possess uncommon interest to their readers by the printing of news items, and both have the power of moulding public opinion. One influences mature minds; the other influences the youthful minds. Both are informative and highly educational. Especially is this latter statement true in the case of schoolpapers.

The schoolpaper has one distinct advantage in educational value—it is the product of its readers. To be successful it must represent the combined effort of every class in the school and be of interest to every student enrolled in those classes. The academic classes may be assigned the task of collecting news, preparing interesting articles, and revising the printers' proofs for errors in English construction, spelling and typography; the art classes may have charge of the illustrations

and general typographic arrangements; the commercial classes may look after the business end of the publication, such matters as soliciting money for subscriptions or advertisements, making disbursements for paper, inks, etc. The actual work of type composition, imposition, presswork and binding will be done by the printing classes.



No other activity can combine into a single educational unity practically the entire facilities of the institution as does the schoolpaper.

With the installation of printing instruction in a school all the academic work is revitalized. English, spelling, arithmetic, grammar, and art will take on a different meaning to

students who have hitherto regarded these studies merely as necessary evils. Taught in conjunction with printing, their great value as vital elements of education is realized.

Request us to send you a chart showing the "Mechanics of Journalism." It is free.

Information: The Education Department of the American Type Founders Company employs the services of professional educators, efficiency engineers and trained salesmen to aid you in establishing printing courses in your schools. With this Company the word "service" is spelled H-E-L-P.

For information write F. K. PHILLIPS, Manager, EDUCATION DEPARTMENT

American Type Founders Company

300 Communipaw Avenue, Jersey City, New Jersey



Conservatory of Music, Northfield, Minn.
Sound-proofed with Cabot's Quilt.
Patton, Holmes & Flinn, Architects, Chicago.

Sound Proof Music Rooms

All school-rooms need sound-proof floors and partitions, but music rooms most of all. The above building was sound-proofed with

CABOT'S QUILT

and the directors report the usual "perfect results."

Sound-proof, Decay-proof, Vermin-proof and Fire-resistant—the only material that meets all requirements.

Samples and full details on request.

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342 Madison Ave., N. Y., 24 W. Kinzie St., Chicago.



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JUNGLEGYM—Trade Mark Reg. U. S. Pat. Off.

Junglegym Climbing Structure

The Playground Equipment Without a Fault

How the children do fly to it. Climbing to the top, turning on the bars, hanging and chinning, traveling the long ladders, chasing through the channels, races, games of tag—no end of fun on the Junglegym. Always on the job—Winter and Summer. No maintenance cost.

"Absolutely no quarreling—Has never been an accident—Think it the safest piece of apparatus made."—Neva L. Boyd, Director, Recreation Training School of Chicago at Hull House.



Write for details and prices

A. G. Spalding & Bros.

Playground Department Chicopee, Mass.

Headquarters for time tested gymnasium and playground apparatus.



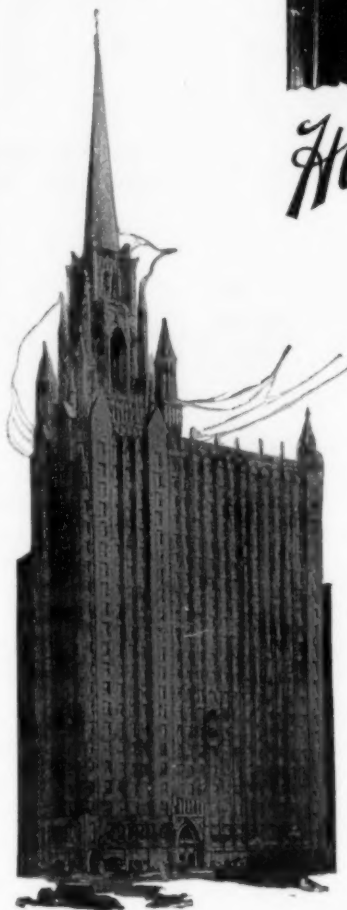
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Are being used in the world's most modern edifices. Large rooms are made continually usable by the use of the edge tight and sound insulated HAMLIN EVANSTON SOUND-PROOF DOORS AND FOLDING PARTITIONS. Hundreds of installations in all parts of the United States are proving that this exclusively patented method is making usable rooms heretofore considered too noisy or a nuisance.

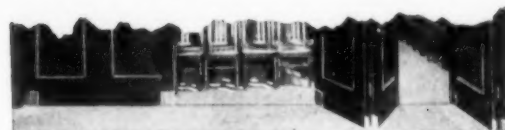
See Sweet's Catalog for description or write for full details.

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You will immediately recognize the superior design and construction features which assure the maximum of safety and durability.

The catalog will convince you as to the quality of our line. And the price list will prove the wisdom of buying Paradise Playground Equipment.

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There are yet a few exclusive territories open to agencies.
Write today for detailed information.

The F. B. Zieg Manufacturing Co.
160 Mount Vernon Ave. Fredericktown, O.

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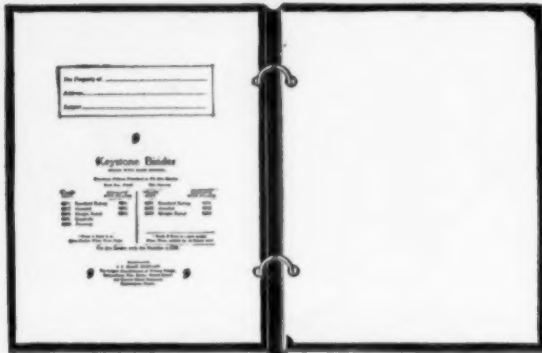
To know music is one thing—to recognize some hauntingly familiar strain as from a Handel oratorio or a Beethoven overture. But to live music . . . to breathe-in music . . . to let your soul stretch tall with music!—is another. You can't get close to music without getting close to life. Folk songs—and under the gay brave tune of some old Irish harper—under some Indian's low paddle-croon . . . always that sadness that humans can't get away from. Music, in its fullness and deepness. And life. Put music into your every day. In your home. In your school. Ask us about Victor Records and Victrolas.

The Educational Department
VICTOR TALKING MACHINE CO.
 Camden, New Jersey
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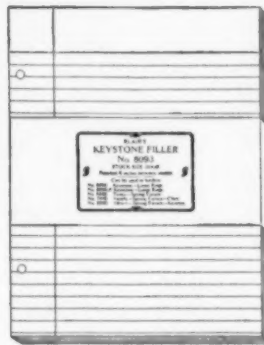
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"Quality, Efficiency and Convenience"



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Made of substantial board, covered with an extra quality of blue cloth; have a flexible cloth hinge at the back or end. Both open side or open end, in sizes from $4\frac{1}{8} \times 7$ to $11 \times 8\frac{1}{2}$ inches. Space between rings as listed. Hinged nicked rings and black enameled eyelets, rings included in price of cover. Label imprinted space for name and subject.



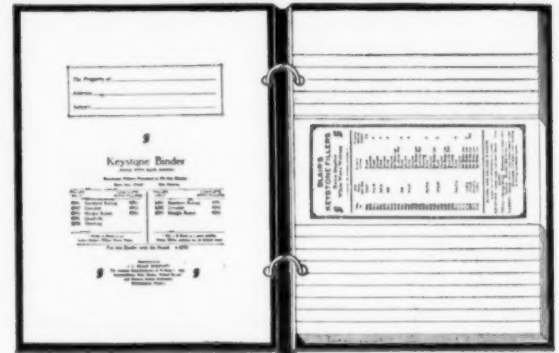
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White Wove Writing
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Margin punched to
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This is the ring used
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J. C. BLAIR COMPANY



New Aluminized Finish Reflects 91% of Sun's Heat Back Through Windows—

A New Principle in Window Shading

Aluminized finish, an exclusive Aerolux Window Shade feature, reflects back through the windows 91% of the sun's heat rays. Prevents shades from absorbing sun heat and radiating it through the rooms. East, south and west exposures can be kept at comfortable temperatures.

Aluminized finish diffuses sun's rays entering the room. Reflects interior light instead of absorbing and deadening rays. Produces a soft, clear, steady light. Aerolux splint construction permits free, natural ventilation the entire length of the windows. These shades are adaptable to any window, wood or steel sash, up to 20 ft. wide. Also furnished in stain finish. Aerolux engineers will study your window shade requirements, make recommendations and submit estimates of cost. No obligation. Write today.



AEROLUX
SUNTITE
CONSTRUCTION—

End view—note how
splints overlap. No
direct sunlight can
come through. No
glare. No barred light
effect possible with
this new Aerolux
weave.

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2667 Oakland Ave., Waukesha, Wis.

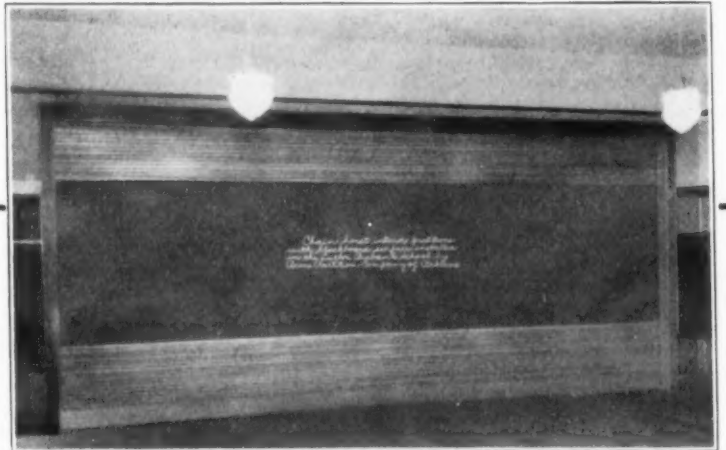
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Luther Burbank School, Stockton, California
Opening 20'-9" x 9'-8"

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The use of Acme Rolling Wood Partitions makes for efficiency in the modern school plant. The Acme Partition illustrated above provides a moving wall for practically the entire side of the room.

The blackboard surface shown is applied directly to the smooth surface of the finished wood.

The entire partition coils overhead out of the way, throwing two class rooms into one large room for assembly purposes.

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Send for complete details.

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Art as a Vacation Playmate

BEFORE you say good-bye for the summer to your pupils in the art classes, help them to realize what a splendid playmate they have gained for the long vacation days.

For art work is one of the most worth-while forms of play with which children can occupy themselves. It is **constructive** play—responding to the natural creative tendencies in young children. It has socializing value, for it makes it possible for many children to play together at the same thing. It carries on the organized play as developed in the schoolroom and stimulates healthy competition.

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For all the child's art activities "GOLD MEDAL" Products provide the right implements. In the clear, bright colors of

"CRAYOLA", *Wax Crayons*

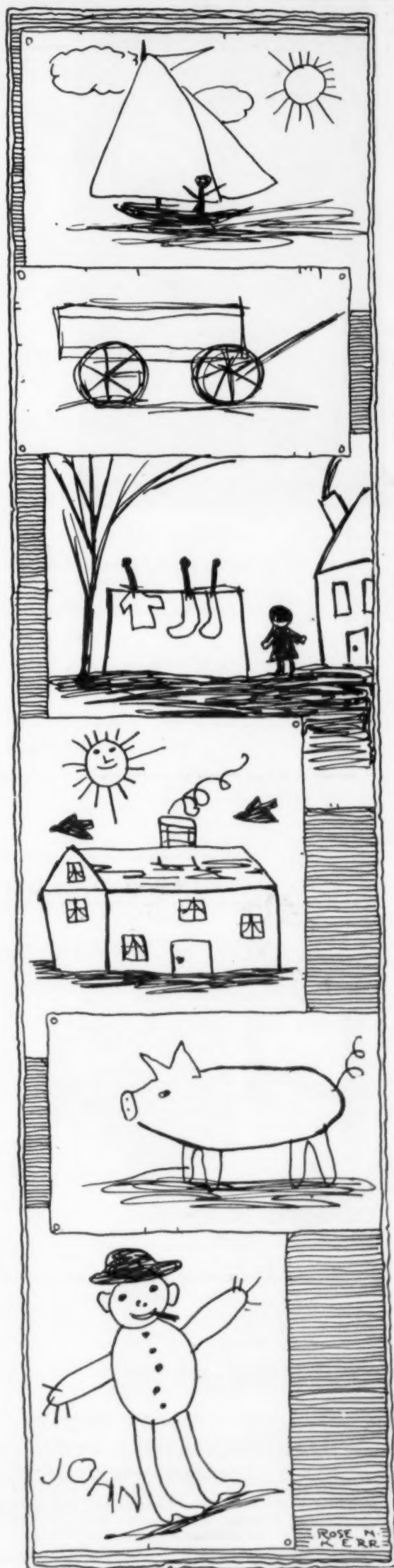
"PERMA", *Pressed Crayons*

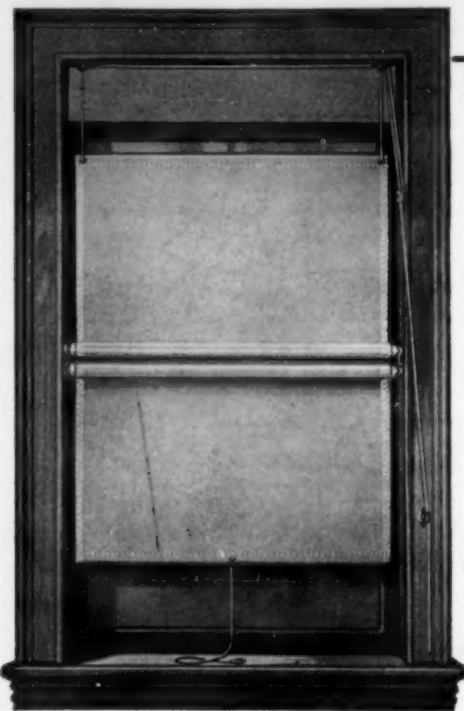
"ARTISTA", *Water Colors*

there is unending inspiration for the child to give free expression to his artistic bent.

Commend Art to your youthful charges as the ideal Summer playmate!

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Window Shades of Every Description Made to Order

The AIRANLITE Double Roll Shade

MOUNTED ON PATENTED BRACKETS
IS THE PERFECT SCHOOL SHADE.

It gives a correct and scientific diffusion of light and permits window ventilation.

It is easy to adjust and cannot get out of order—is strong and durable—good looking and well made.

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For Long and Satisfactory Service Use AIRANLITE DOUBLE ROLL SHADES

(Name is Copyrighted, U. S. Patent Office)

They Increase the Efficiency and Improve the Health of Teachers and Pupils.

Write for Prices and Catalog.

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CAUTION!

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Be sure you get AIRANLITE Double Roll Shades mounted on AIRANLITE Patented Brackets.



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Wiese Resources Protect Your Investment

This popular desk is 41" wide, 69" long and 32" high. Accommodates sixteen students. Built of solid selected oak, golden finish, top of birch strips treated ebonacid. Further particulars gladly sent.

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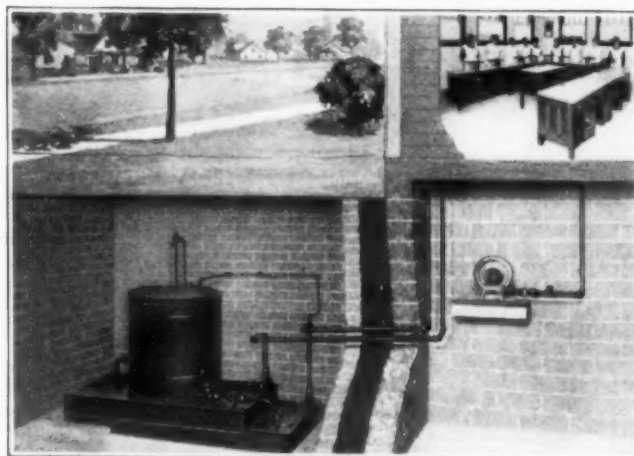
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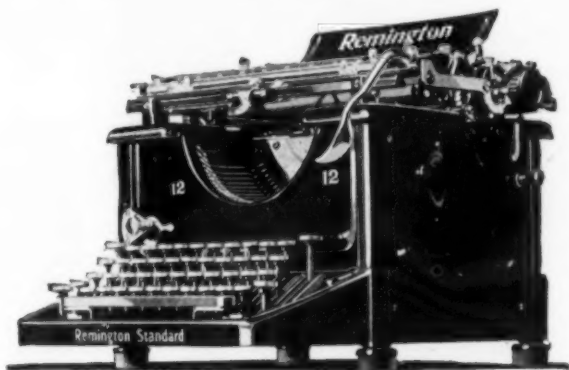
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Get facts which every
school board member
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Learn the Way

to increase class room efficiency
— gain greater success from
teachers' efforts. Mail the cou-
pon for important data.



See just how schools and universities everywhere are using this remarkable new aid to visual methods of instruction. How by focusing pupils' attention on subjects under discussion, a keener perception of the subject is awakened, concentration developed, teachers' efforts rewarded with greater success, and classroom efficiency heightened greatly. The coupon brings complete information which every school board member should have. Clip it now.

A Definite Need

With ordinary methods of instruction the attention of pupils is often scattered about the class room. Objects in and outside the room catch the eye. Minds are distracted. Pupils' thoughts are divided between the subject under discussion and objects not connected with class room activities. Interest lags. Teachers' time is lost in the endeavor to compel attention. Class room efficiency is reduced. And often the efficiency of whole schools is thus impaired.



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Now there is a new method of instruction. A method used by universities and many high schools everywhere. With this new method all illustrations pertaining to subjects to be discussed are mounted on a single compact fixture composed of a number of wings swung vertically on a central pivot. As points are discussed, illustrations are easily swung into view by the teacher. All attention is concentrated upon a few square feet of space. And yet these few square feet give a display area equivalent to all of the blackboard space in the room. Because display area is thus multiplied, these fixtures are called Multiplex Educational Display Fixtures.

Amazing Results

Wherever employed, Multiplex Equipment focuses pupils' attention on the subject being discussed. It compels attention. Thus it avoids distraction. It develops concentration and awakens a keener perception and appreciation of the subject. Teachers' efforts are rewarded with amazing success.

The efficiency of many class rooms is thus increased. In addition to affording a remarkable aid to class room instruction, Multiplex Equipment is ideally suited to general display purposes.

Used Everywhere

Let us send you our catalog and price list, with interesting information about how hundreds of schools and universities are improving class room efficiency and securing amazing results from teachers' efforts with Multiplex Equipment. Use the coupon. No obligation is attached to your request. We only want to give you the facts which every school board member should have on matters of educational interest. Tear out the coupon now.



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Multiplex Display Fixture Company
921 North Tenth St., St. Louis, Mo.

MULTIPLEX

Without obligation, I would like to know more about the new method of instruction with Multiplex Educational Display Equipment. Tell me what universities and high schools are using it and how. Give me complete information for my files.

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Address

City..... State.....

Bradley Washfountains

PROMOTE BOTH
CLEANLINESS AND
SANITATION

REQUIRE BUT A
MINIMUM OF
JANITOR SERVICE

**"The First Cost
is the Last Cost"**

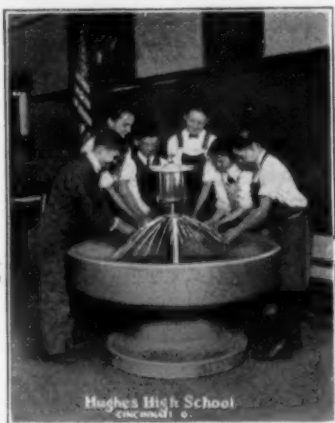
Bradley Washfountains represent a great advance in modern washroom equipment. They promote both cleanliness and sanitation, are self cleaning and require but a minimum of janitor service.

And Bradley Washfountains are most economical. Their use reduces the number of fixtures required. They save floor space, use less water, and permit the use of fresh tempered water at all times.

For use in Schools, Colleges and Universities and in every type of public lavatories, there is no fixture equal to the Bradley Washfountain in utility, durability and beauty and in economy of operation and maintenance.

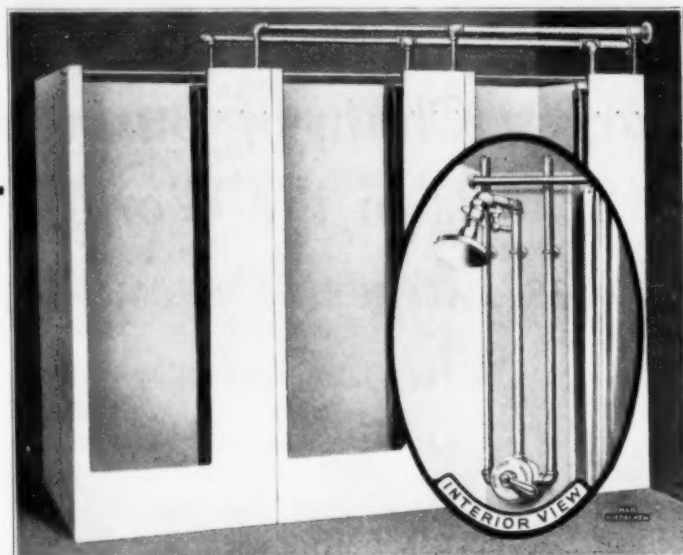
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Bradley Washfountain Co.
Milwaukee, Wisconsin



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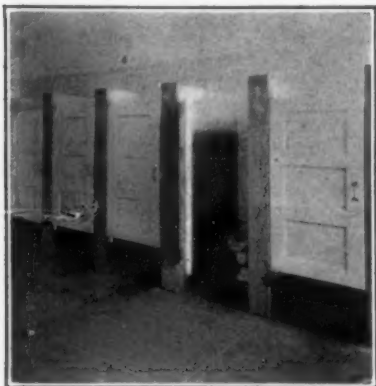
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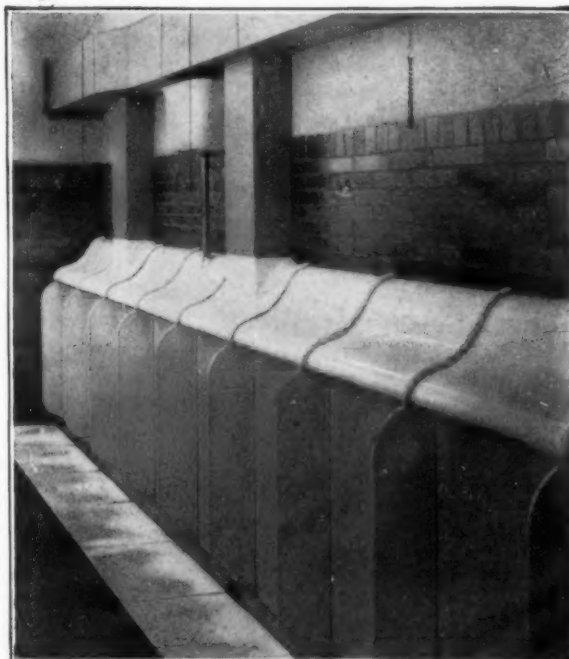
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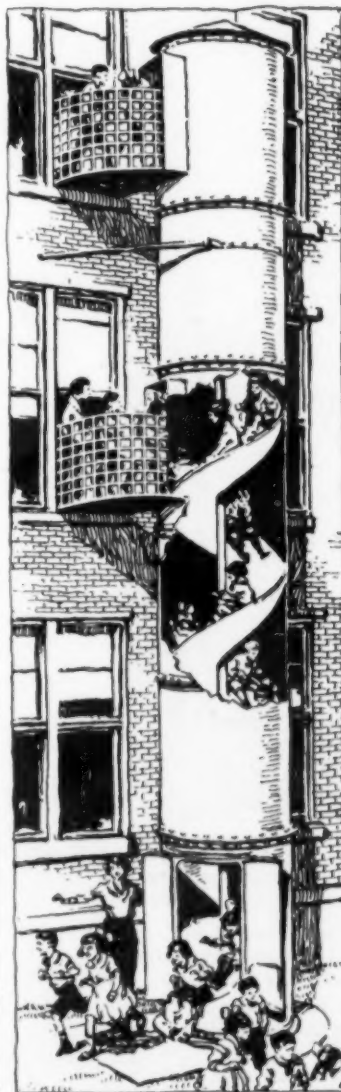
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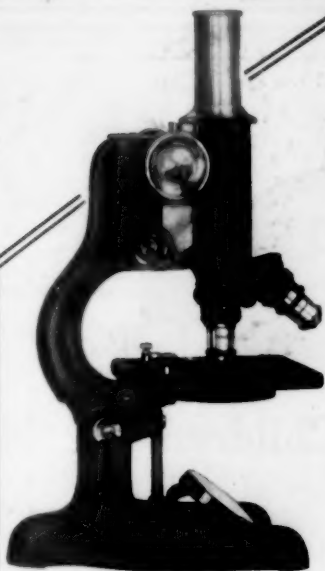
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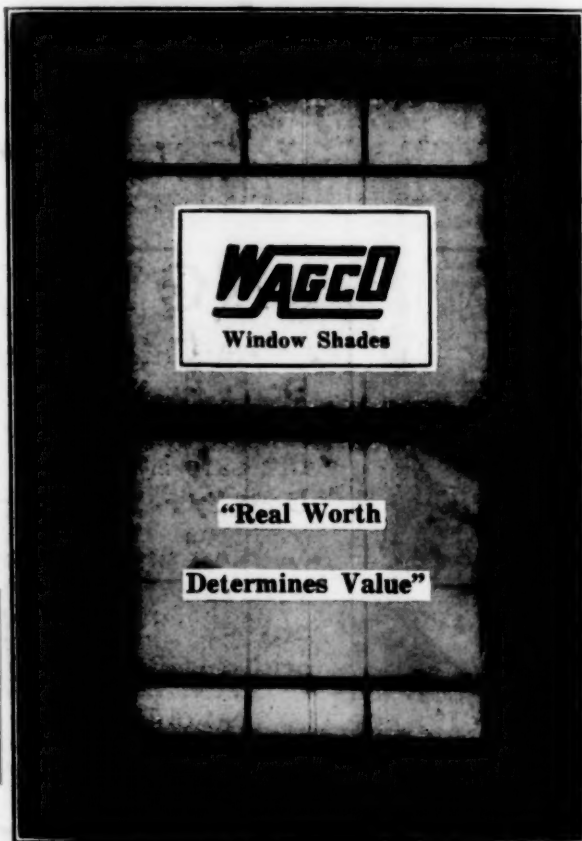
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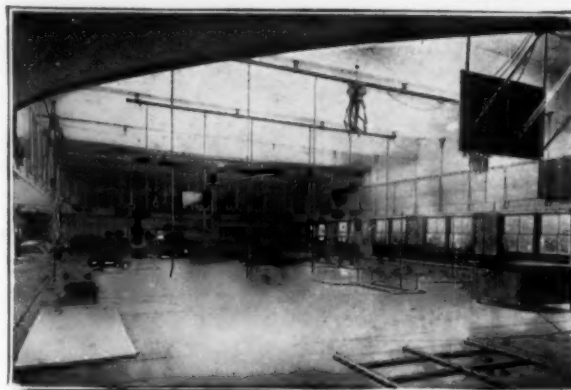
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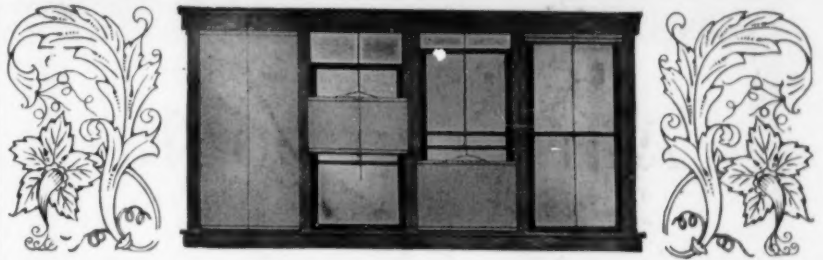
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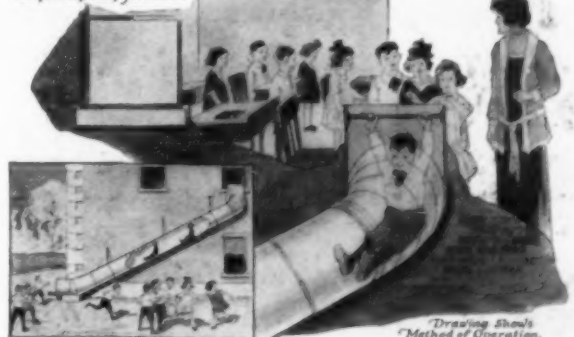


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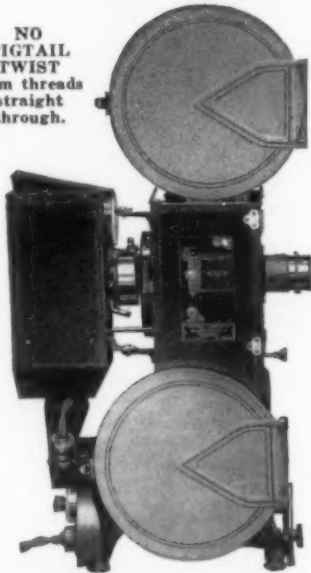
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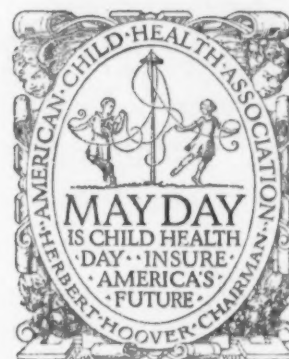
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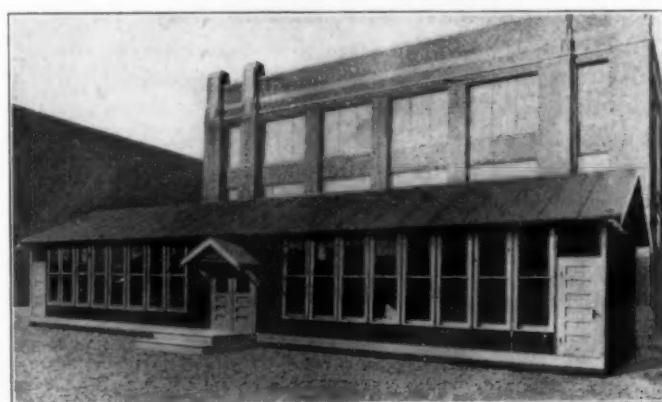
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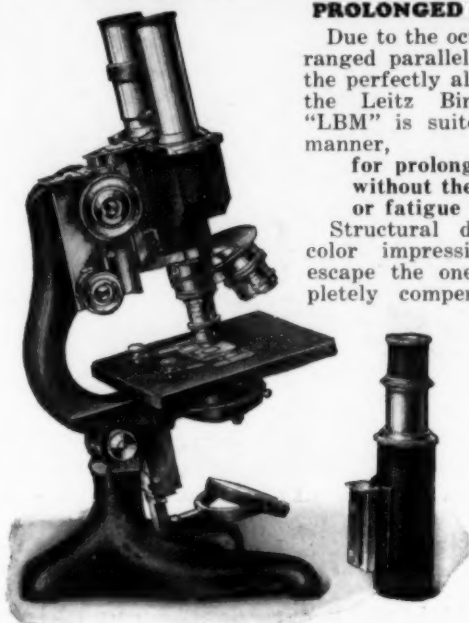
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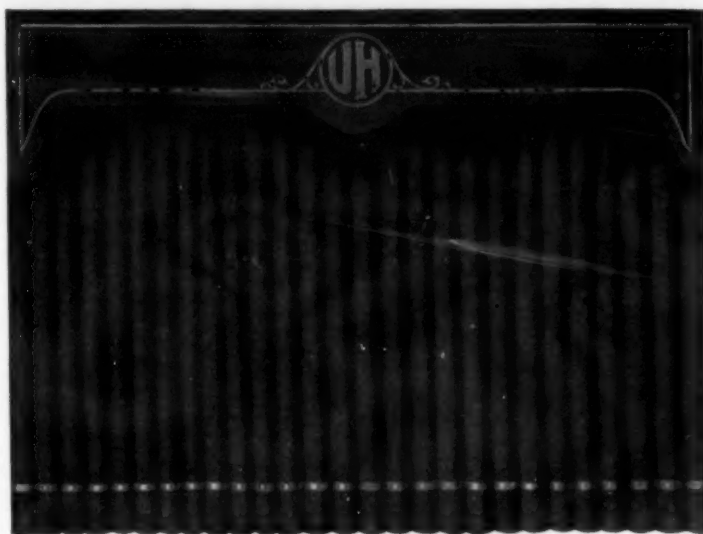
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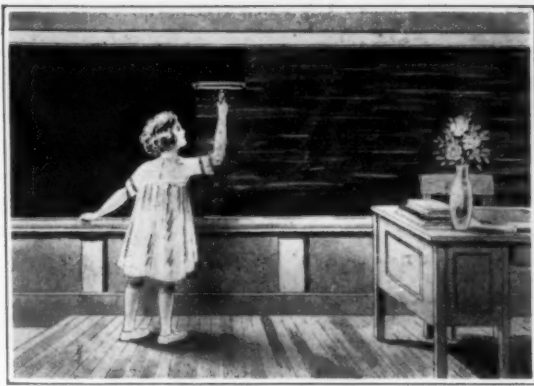
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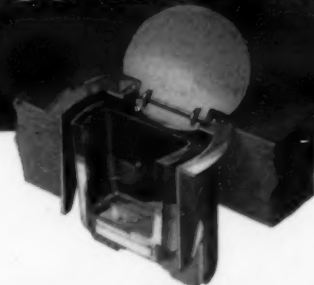
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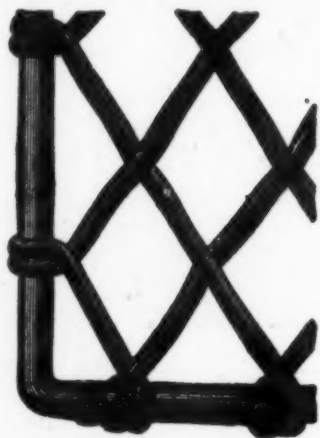
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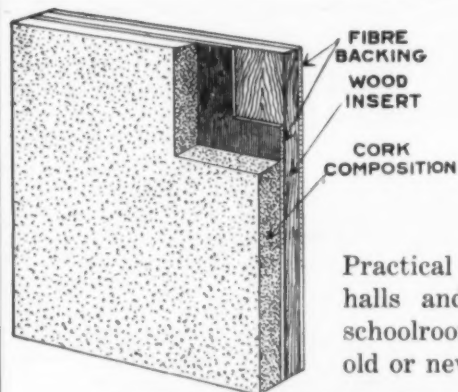


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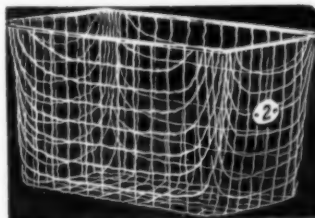
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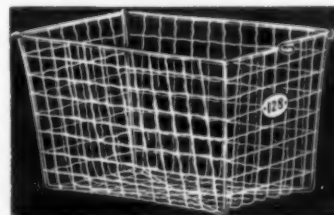
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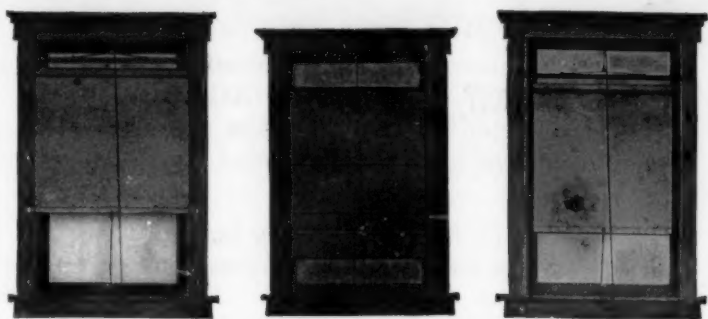
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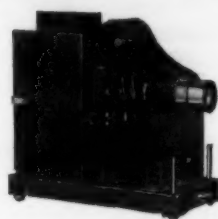
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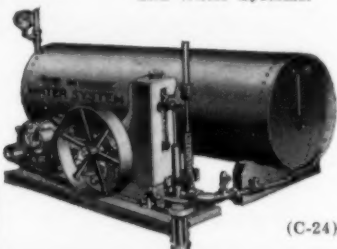
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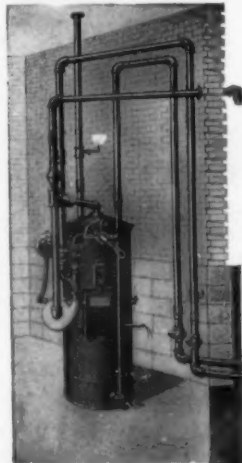
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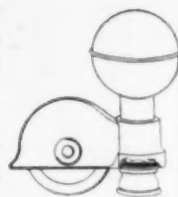
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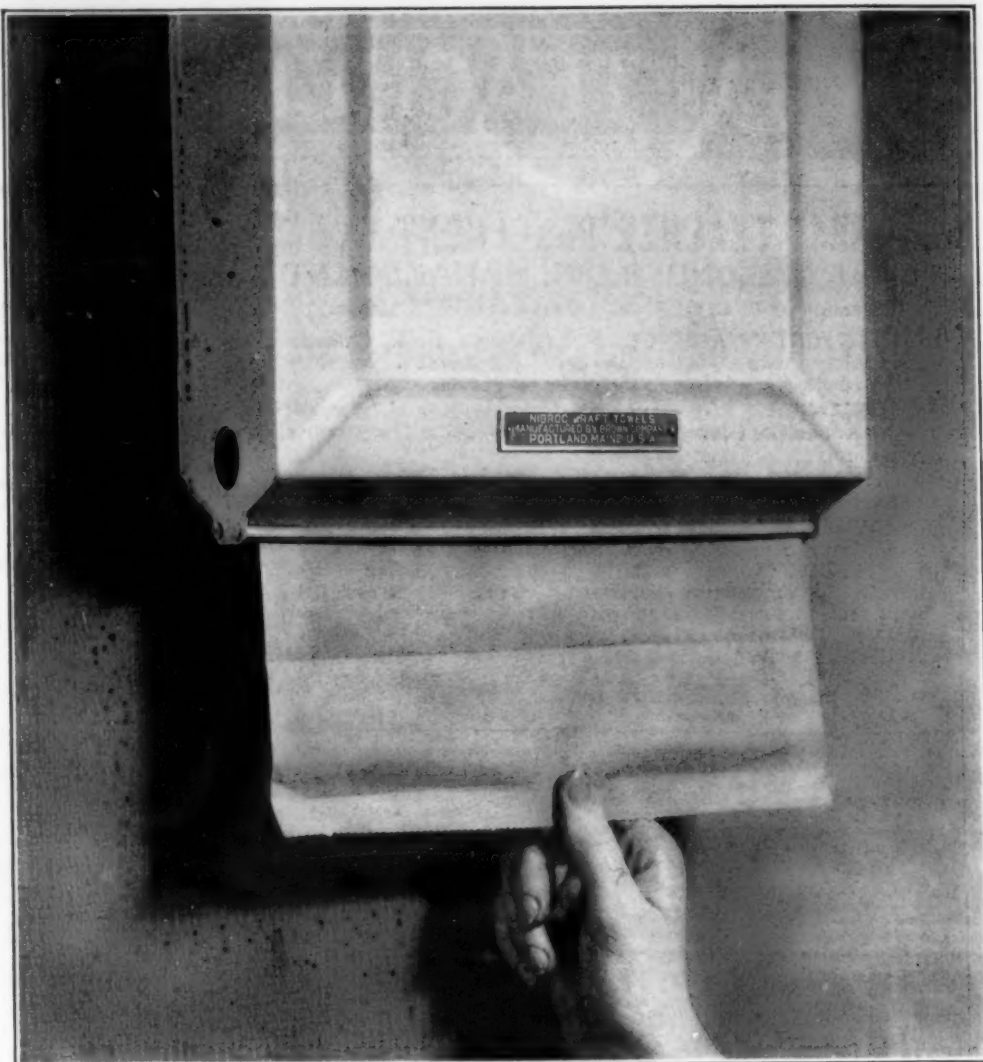
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American Blower Company
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American Blower Company

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(See Schoolhouse Architects' Directory)

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Gillis & Geoghegan

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Arlington Seating Company
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Heywood-Wakefield Co.
Kundtz Company, The Theodor
Peabody School Furniture Co.
Steel Furniture Company

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Detroit Steel Products Company

BASEMENT WINDOWS, STEEL

Detroit Steel Products Company

BENCH LEGS

Angle Steel Stool Company

BLACKBOARD CLEANER

Mohawk Slate Machine Company

BLACKBOARDS—MFRD.

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N. Y. Silicate Book Slate Co.

Rowles Co., E. W. A.

Standard Blackboard Company

Weber Costello Company

BLACKBOARD-SLATE

Natural Slate Blackboard Co.

Penna. Structural Slate Co.

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Leavitt Mfg. Company

Wayne Iron Works

BOILERS

Frost Mfg. Company, The

General Boilers Company

Heggie Simplex Boiler Company

Kewanee Boiler Company

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Peterson & Company, Leonard

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Iroquois Publishing Company

Walraven Book Cover Co., A. T.

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Remington Typewriter Company

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Bruce Publishing Co.

Compton & Company, F. E.

Gregg Publishing Company

Heath & Co., D. C.

Houghton, Mifflin Co.

Iroquois Publishing Company

Laidlaw Brothers

Little, Brown and Company

Longmans, Green & Company

Merriam Co., G. & C.

Newson & Company

Palmer Company, A. N.

Winston Co., The John C.

BRUSHES

Palmer Company, The

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Duriron Co., Inc., The

Milwaukee Corrugating Company

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Pick & Company, Albert

Sani Products Co., The

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Van Range Co., John

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Monroe Calculating Machine Co.

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Clarín Manufacturing Co.

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Stakmore, Company, Inc.

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Landis Eng. & Mfg. Co.

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Wiese Laboratory Furniture Co.

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Bonded Floors Co., Inc.

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Binney & Smith

National Crayon Co.

Rowles Co., E. W. A.

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CRAYON TROUGHS

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Imperial Desk Company

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Colt's Patent Fire Arms Mfg. Co.

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Shewana Cabinet Works

DISPLAY FIXTURES

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Cleveland Range Co.

Dougherty & Sons, Inc., W. F.

Freeport Gas Machine Co., Inc.

Kewanee Mfg. Co.

Peterson & Co., Leonard

Pick & Co., Albert

Sheldon & Co., E. H.

Standard Gas Equipment Corp.

Van Range Co., John

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Sargent & Company

DOORS, STEEL-FIREPROOF

Detroit Steel Products Company

DRAFTING DEPARTMENT

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Economy School Furniture Co.

Hamilton Mfg. Co., The

Kewanee Mfg. Company

Sheldon & Co., E. H.

Wiese Laboratory Furniture Co.

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Clow & Sons, James B.

Imperial Brass Mfg. Company

Murdock Mfg. & Supply Co., The

Nelson Mfg. Company, N. O.

Puro Sanitary Drink. Fount. Co.

Rundle-Spence Mfg. Company

Taylor Company, Halsey W.

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ERASERS

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Rowles Company, E. W. A.

Weber Costello Co.

ERASER CLEANERS

Lynn Company, James

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Anchor Post Iron Works

Cyclone Fence Co.

Page Fence & Wire Prod. Assn.

Stewart Iron Works Co., The

Wayne Iron Works

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Yawman & Erbe Mfg. Company

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Rand Kardex Bureau

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FIRE ESCAPES

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Potter Manufacturing Corp.

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Carter-Bloxonend Flooring Co.

Maple Flooring Mfrs. Ass'n.

Muller, Inc., Franklyn R.

Stedman Products Company

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Duraflex Company, The

Stedman Products Co.

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Duraflex Co.

Heywood-Wakefield Co.

Muller, Inc., Franklyn R.

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FLOOR TILE

Bonded Floors Co., Inc.

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FLUSH VALVES

Bowling Manufacturing Co., The

Haas Company, Philip

Clow & Sons, James B.

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Wilson Corp., Jas. G.

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Andrews Company, The A. H.

Angle Steel Stool Company

Arlington Seating Company

Columbia School Supply Company

Derby & Company, Inc., P.

Detroit School Equipment Co.

Economy School Furniture Co.

Gunn Furniture Company

Hamilton Mfg. Co., The

Heywood-Wakefield Co.

Imperial Desk Company

Kewanee Mfg. Company

Kundtz Company, The Theo.

National School Equipment Co.

Peabody School Furniture Co.

Rand Kardex Bureau

Readsboro Chair Company

Royal Metal Mfg. Company

Rowles Co., E. W. A.

Scientific Seating, Inc.

Stafford Mfg. Company, E. H.

Standard School Equipment Co.

Steel Furniture Company

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Freeport Gas Machine Co., Inc.

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GREENHOUSES

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Peerless Unit Vent. Co., Inc.

Webster & Co., Warren

Young Pump Company

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INK

Rowles Co., E. W. A.

INK WELLS

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Squires Inkwell Company

Tannetitz Works, The

U. S. Inkwell Company

JANITORS' SUPPLIES

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Milwaukee Dustless Brush Co.

Palmer Company, The

Pick & Co., Albert

Robertson Products Co., Theo. B.

Van Range Co., John

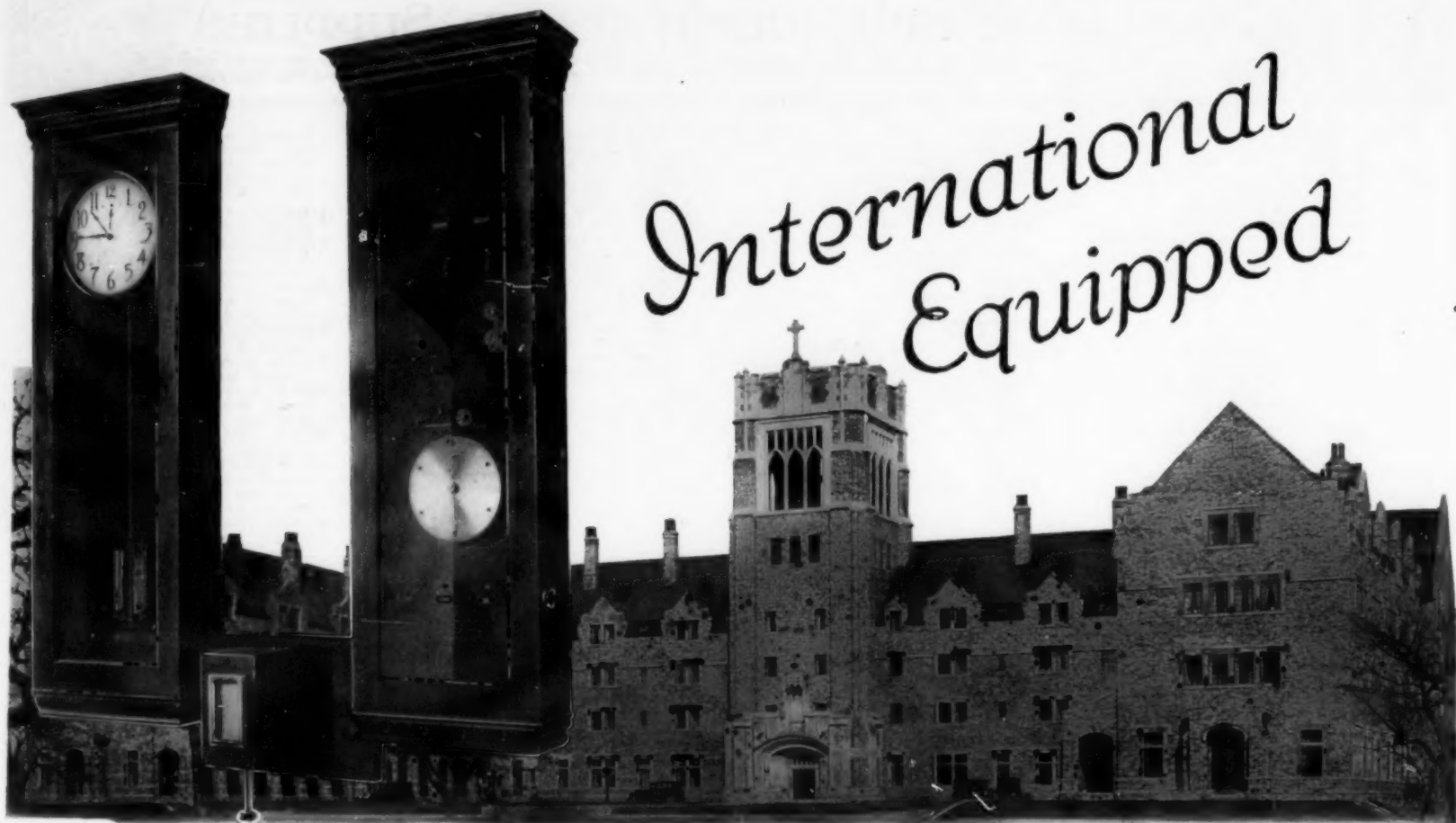
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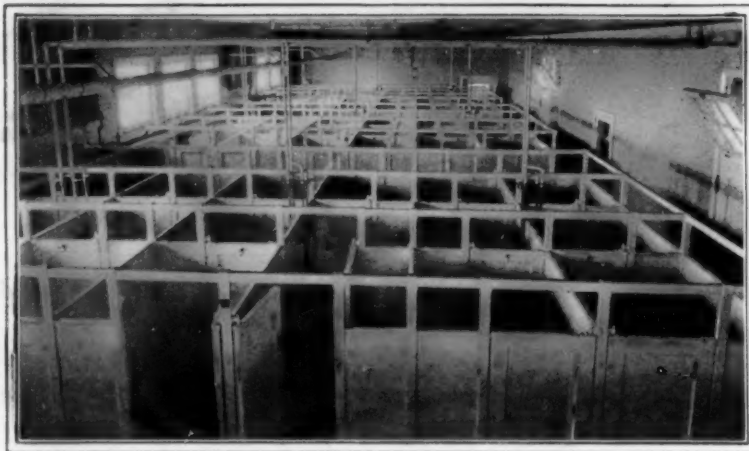
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